

THE MILLING WORLD

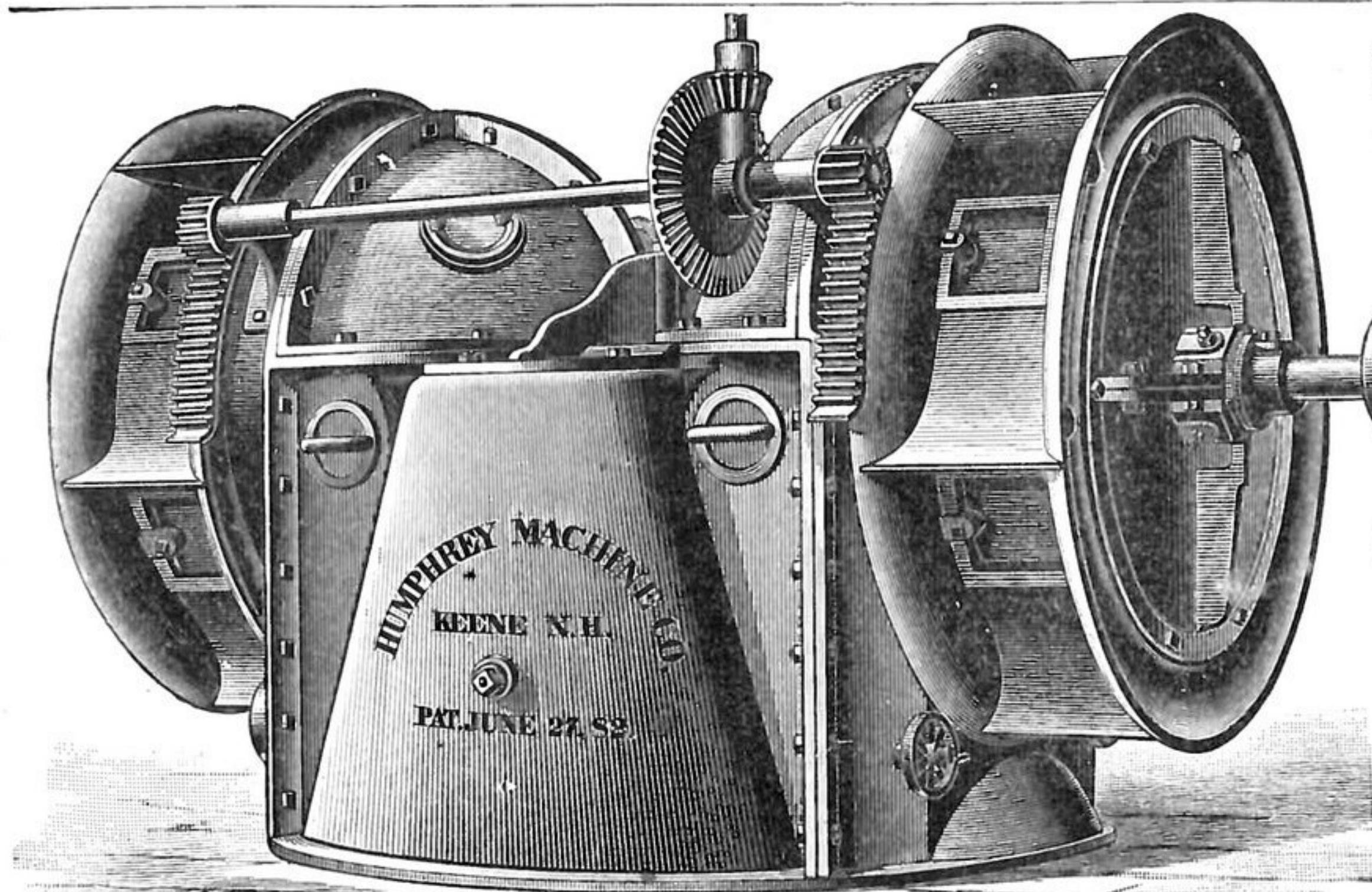
AND
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXIII. No. 9.

BUFFALO, N. Y., OCTOBER 27, 1890.

\$1.50 PER YEAR.

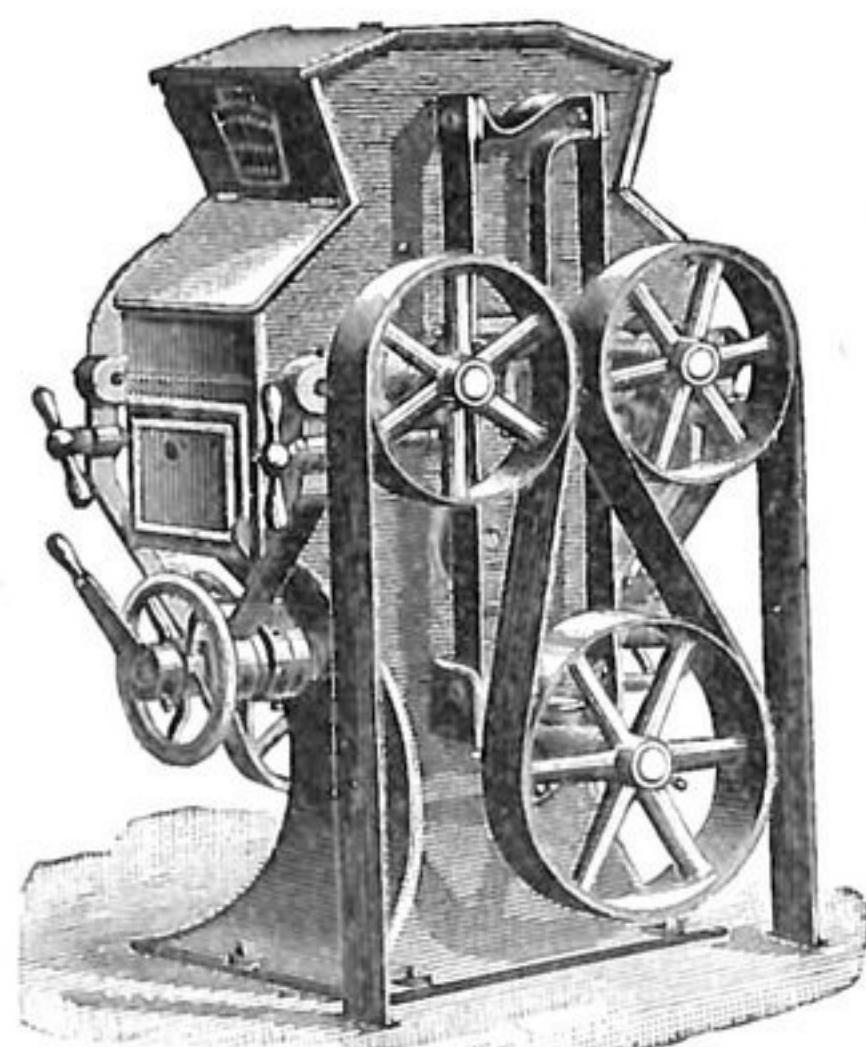


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On Horizontal Shaft. Saves cost, annoyance and loss of power incident to use of gears. Affords more available power from water applied at full or part gate than any other. The cheapest, best and most desirable Water Wheel yet produced.

EFFICIENCY, ECONOMY and EXCELLENCE FULLY GUARANTEED.

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KEENE, - - N. H.

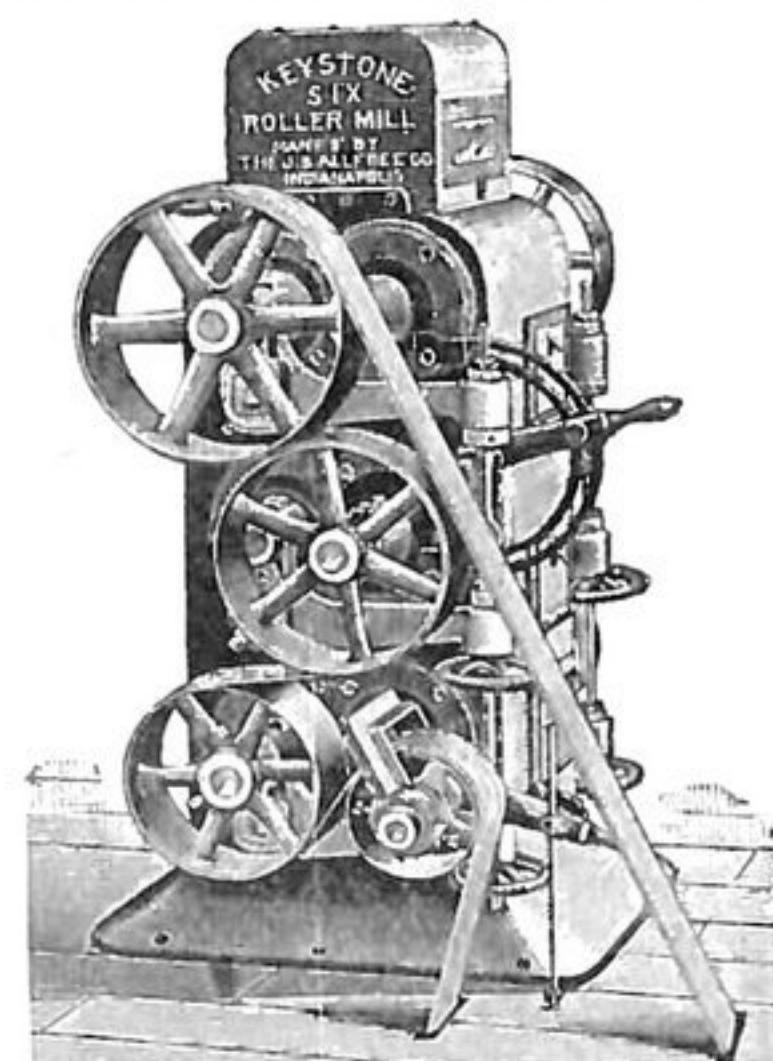


Flour Mills. Corn Mills.

Send for Circular of our New 6-Roller Corn and Feed Mill.

Entire Belt Drive.
Positive Differential.
Automatic Vibratory Feed.
Large Capacity.

Easily Operated.
Great Strength and Rigidity.
Simple Adjustments.
Perfect Construction.

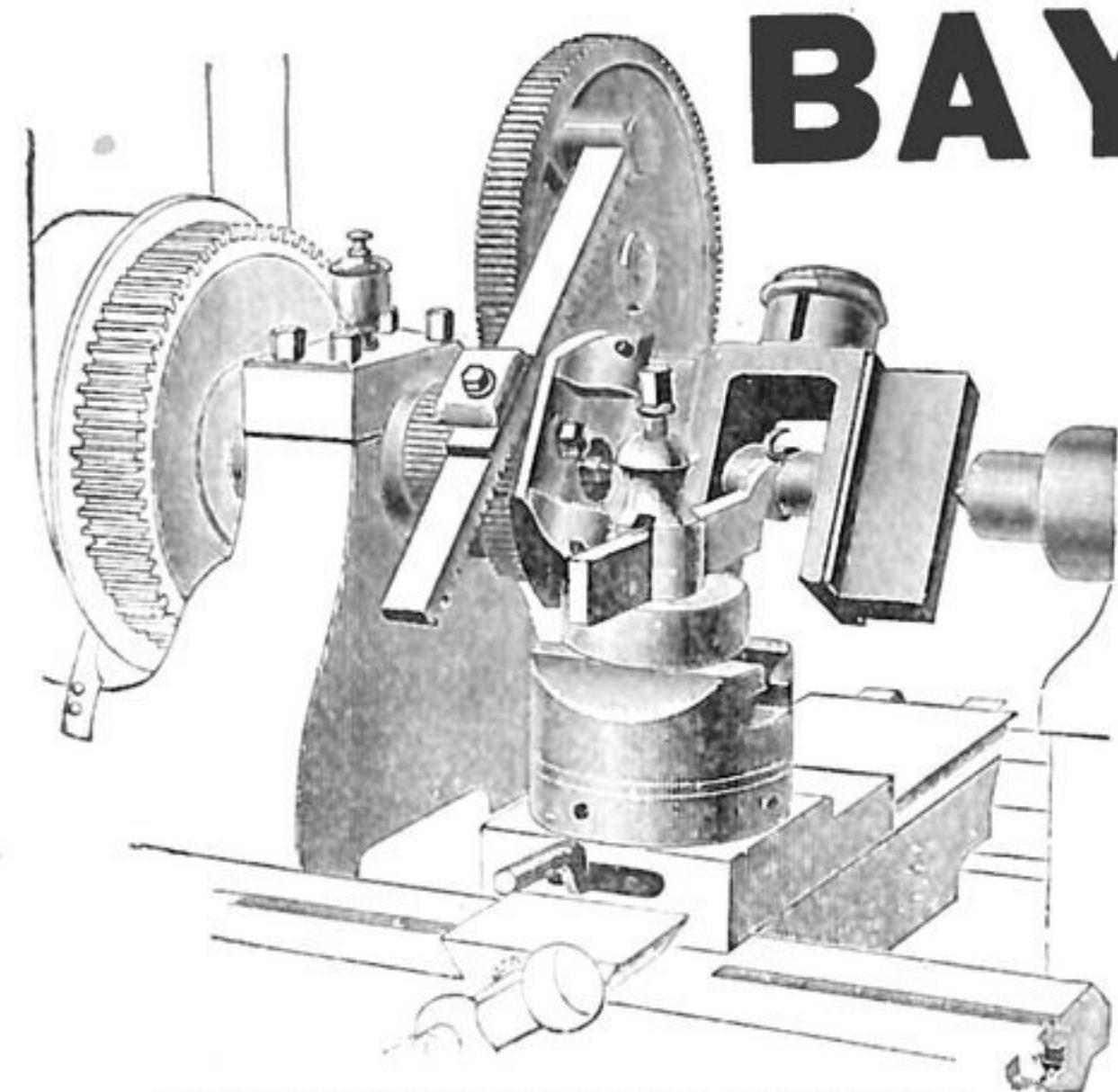


"Keystone" 6-Roller Corn & Feed Mill.

ADDRESS THE J. B. ALLFREE CO., 76 to 86 Shelby Street, INDIANAPOLIS, IND.

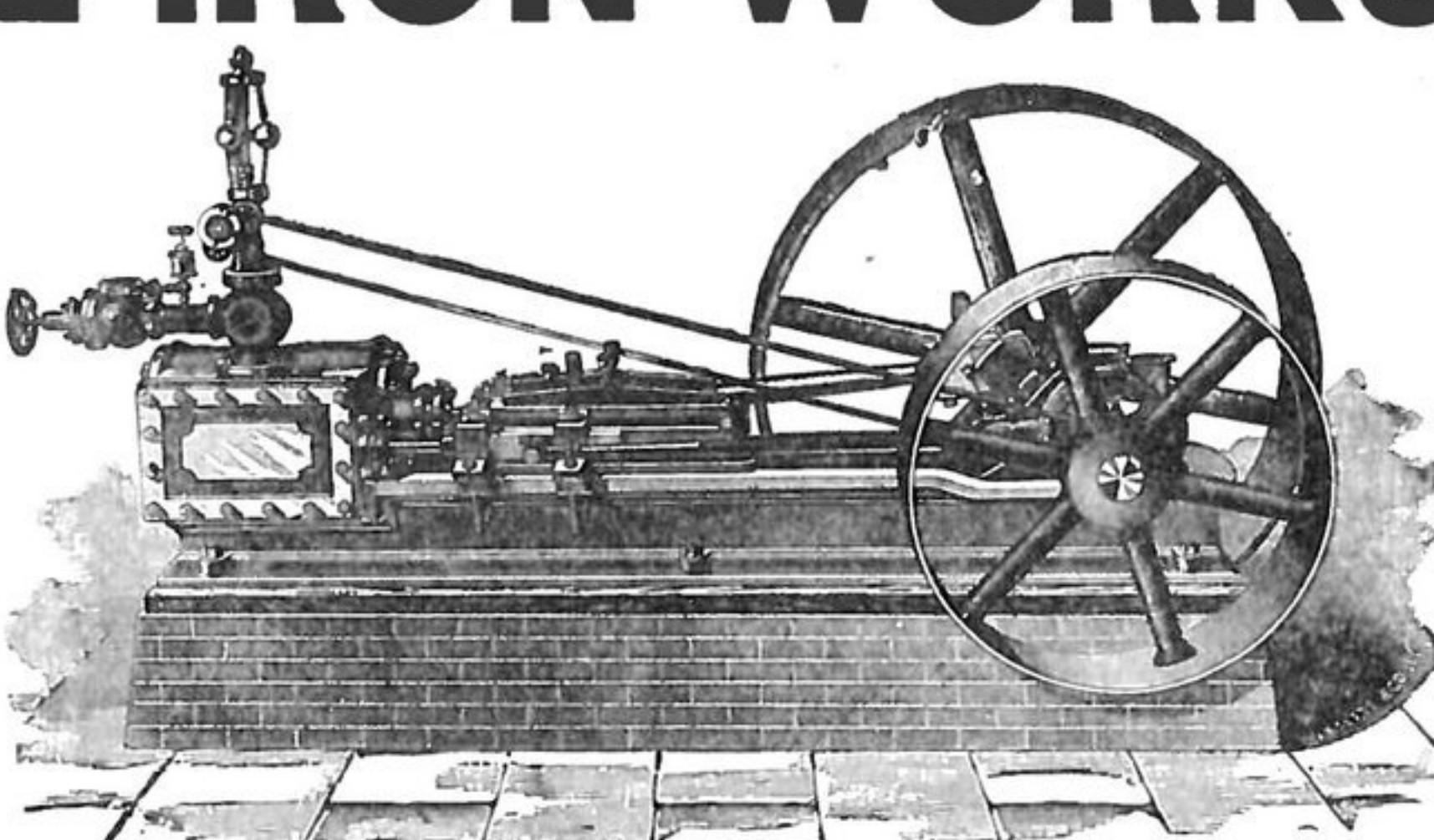
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Manufacturers of—
**Engines, Boilers,
AND
HOISTING MACHINES.**



PATENT CROSS-HEAD MACHINE.

Also the Patent Cross-Head Machine and Acme Cube Pipe Tongs. We make either Center or Side Crank Engines, on same bed. Make engines from 5 to 250 Horse-Power. Have over 3,500 Engines and Boilers and over 1,000 Hoisting Machines in use, and all giving good satisfaction. Send for Catalogues and Prices.



IMPROVED DETACHABLE CENTER-CRANK ENGINE.

Noble & Hall, Box 462, Erie, Pa.

OFFICE OF

CASE MANUFACTURING COMP'Y

COLUMBUS, OHIO.

The Case Roller Mills. Over 14,000 Pairs in Use.

PLEASE READ OUR DESCRIPTION OF THEM, EVERY STATEMENT OF WHICH IS ABSOLUTELY TRUE.

PLEASE READ WHAT MILL OWNERS SAY ABOUT THEM.



The accompanying cut is a correct illustration of our latest improved Four Roller Mill. For fine work, great durability, simplicity, and general excellence, they stand "head and shoulders" above all others.

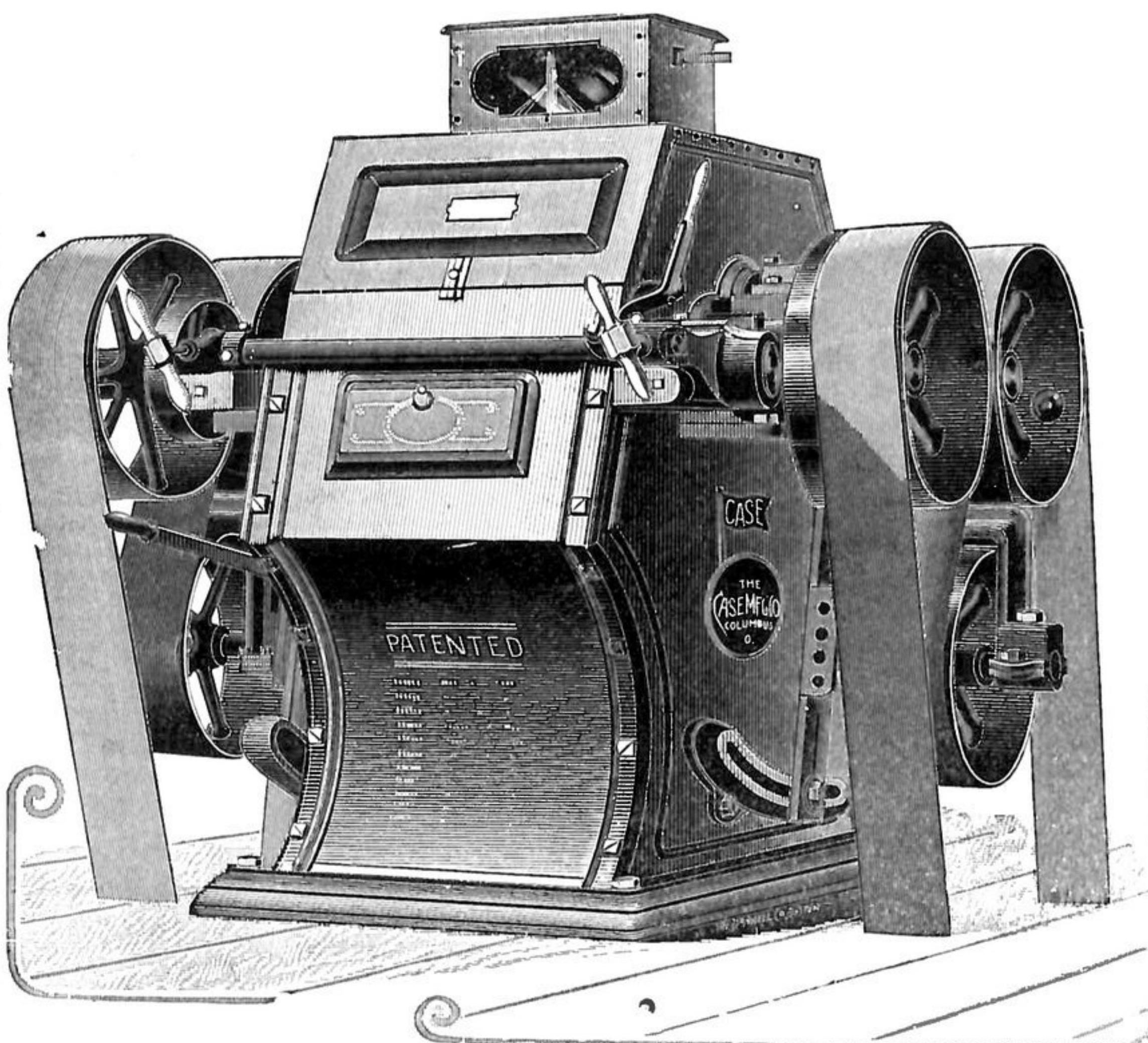
The frame is of iron with a heavy iron base.

The wood-work in top is of select cherry and black walnut, carefully shellacked and varnished.

The handles of adjusting screws and levers are finely nickel plated.

The joints are tight and dustless.

The adjustments easy, simple and perfect.



The roll bearings are wide and finely babbited.

The belt drive is positive—no little short belts to slip.

The door for examining stock is a great convenience.

The arrangement for leveling rolls, simple and accurate.

The rolls can be thrown apart their entire length by one movement of the lever, and brought back again to original position, requiring no re-setting or experimenting.

Each machine is provided with our AUTOMATIC VIBRATING FEED, which requires no attention, and never fails to spread the feed the entire length of the rolls.



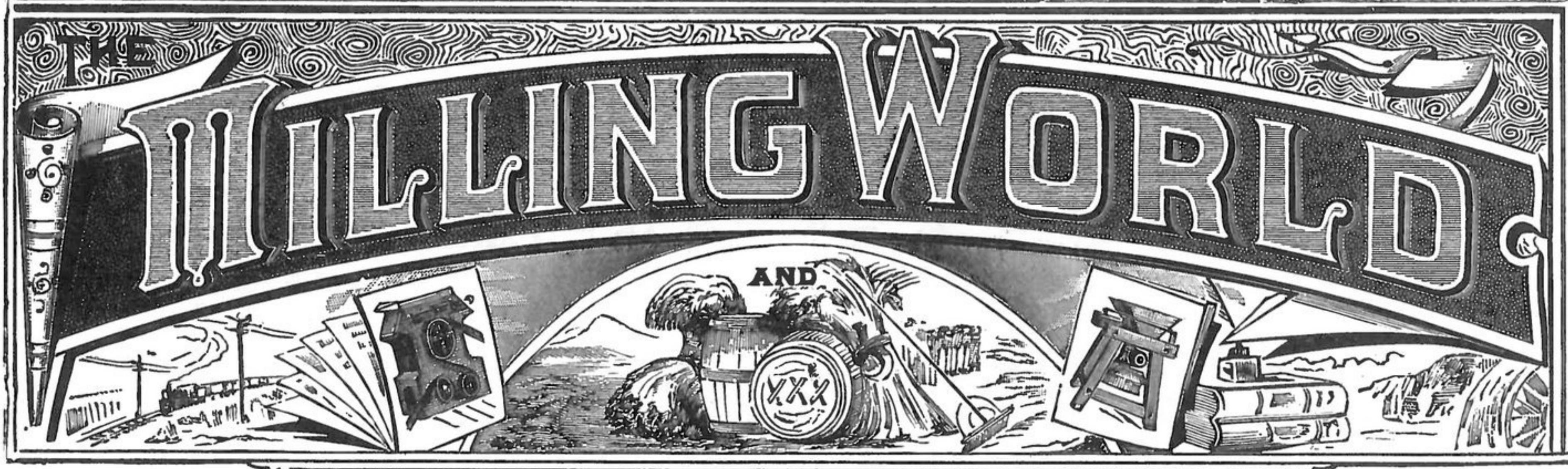
LISTEN! MICHIGAN MILLERS TALKING NOW.

CHARLOTTE, MICH., AUG. 5, 1890.

MESSRS. CASE MFG. CO., COLUMBUS, O.

Gentlemen: The mill is running fine. We are enjoying quite a fine little trade. Already have put over twenty tons of flour on the market here since we started the 7th of July, and it is giving elegant satisfaction. Every one who has seen our outfit pronounces it A 1, and the Case Automatic Feed can't be beat. In fact the Rolls are models of perfection. We are making a close finish and placing our goods alongside of the long system mills, carrying off the cake. We are highly pleased with the millwright work, and find your Messrs. McKenie and Shough congenial gentlemen to do business with.

Very truly yours, PERKINS & MOON.



CHRONICLE OF THE GRAIN AND FLOUR TRADE

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WISDOM is justified of her sons. Even the Minneapolis "Yahoo" has really discovered that "The Millers' National Association is not filling the bill." And this right at the point of time when Brother Hall has discovered that the National is all right! Those "alleged" milling journals, "The American Miller," "The Millstone," "The Roller Mill," "The St. Louis Miller," "The Millers' Review" and THE MILLING WORLD have several times intimated that the National was not "filling the bill," and for doing so they have been subjected to awful "Yahooings" from the Northwest. Well, times change, and men change with them. What has hit the "Yahoo," anyhow?

A COTEMPORARY claims that it was the "first milling journal to enter a protest against the manner in which the Millers' National Association ignored the interests of small mills." Is that claim historically correct? THE MILLING WORLD has during the past five years protested against that very thing, and under former managers it was outspoken on the subject. Ever since the National became a close corporation it has ignored the small millers, and there is hardly a milling journal in the United States that has not called attention to that fact. A comparison of files would show THE MILLING WORLD to be dangerously close to "first place" in the work of condemning the manifest foibles of the National.

ONCE more the wheat-importing countries of Europe are being compelled to acknowledge that one swallow does not make settled summer. Two years ago Russia had an unusually abundant crop of wheat, while the United States had a small crop. Russia increased her exports of wheat, while the United States exports fell off correspondingly. The British importers were jubilant. They were quite sure that the day of their deliverance from dependence upon the United States had come. One year ago Russia had another large crop, while the United States had also a large crop. Russian exports continued large, although not equal to those on the crop of 1888. The Britons felt more assured that Russia had become a sure source of supply to take the place of the United States. This year the Russian crop is below the average both in quantity and quality, and the appreciation of the Russian rouble has helped to make wheat exportations unprofitable, and now, although the United States again has a short and by no means superior crop, making the situation just as it ought to be to encourage Russian exportation, Russia is disappointing expectations, as may be seen in the following cablegram from Odessa, Russia, under date of October 16th: "The marked and steady decrease of the export trade in Russian grain is attracting the serious attention of the Government. The total shipments from all the Russian ports for the first six months of the present year only reached 257,000,000 poods, the pood being equal to thirty-six pounds, against 310,000,000 poods in 1889 and 346,000,000 in 1888. In view of these facts, the Russian economists are awaking to the fact that American, Indian and Egyptian grain is driving the Russian product out of the market, depriving their country of its former title of the granary of Europe. While this decrease is ac-

knowledged to be progressing, nothing is being done to encourage other industries to take its place, and the prospect for the future of the already wretchedly poor and oppressed peasantry, who barely held their own while Russia was still at the head of grain-selling nations, is dark indeed." One Russian swallow, or even two, can not establish a summer for Great Britain. After the Indian, Australian, Argentinian and Canadian failures to furnish Great Britain with all the wheat grain she requires, making her independent of the United States, it needed only the Russian failure to establish the plain fact that Great Britain is dependent upon the United States to a greater extent to-day than she ever was before, so far as wheat supplies are concerned. The great mistake made by Great Britain has been in pursuing a course that has driven English wheat-growers out of business by forced competition with the cheap and inferior wheat of India. It is asserted that over 2,000,000 acres of the best English land have been thrown out of wheat-growing in ten years, simply because the Indian hammer has pounded all the value out of wheat and all the profit out of wheat-growing. At the English average of 30 bushels to the acre, that area would grow at least 60,000,000 bushels of wheat, and that is a large portion of the present imports of Great Britain. In whatever light it is viewed, the British "enterprise" in wheat has been a disastrous failure, a gigantic economic mistake.

EVERY milling journalist, who reads the proceedings of the late convention of the Pennsylvania Millers' State Association at Reading, will wish as he reads that there were a national association doing for all the millers of the United States just what this State association is doing for the millers of Pennsylvania. With a national association working on the same practical lines, every milling journal in the country would be glad and willing to join forces with it and aid in bringing the great milling industry of the United States into such shape as would give it all the benefits of harmony, co-operation and intelligent effort. The editors of the milling journals are not "hostile" to the National, notwithstanding Mr. Seamans' very explicit statement in the Minneapolis convention. They simply regard it as a body claiming to do or to mean one thing while doing or meaning something else. They know what the millers of the land require in an association, and they know that requirement is not met by the National. A really "national" organization they would cheerfully support. It should be an organization so broadly framed that it would cover the interests of spring and winter wheat sections, of Pacific Coast, central valley and eastern sea-board sections, and of home and foreign trade sections alike. It should be intensely practical. It should be a regular school for flour-makers. Such an association is needed. Such an association could be formed, and it would draw in a majority of the flour-makers of the country and become invincible. It would be able to fight "patent sharks" and to secure incalculable benefits in many important ways for the millers. The Pennsylvania, Indiana and other local associations have set the model for a truly national organization of millers. Will that model ever be imitated on a national scale?

The DAWSON ROLL WORKS CO. FOUNDERS & MACHINISTS,

—MANUFACTURERS OF THE—

Dawson Roller Mills

—AND FURNISHERS OF—

CHILLED IRON ROLLS

WITH DAWSON PATENT CORRUGATION.

**ALL STYLES OF FLOUR MILL ROLLS RE-GROUND AND
RE-CORRUGATED WITH ANY FORM OF CORRUGATION.**

We have had large and extended experience in grinding and corrugating chilled rolls for milling, and have one of the largest and most improved plants in the country for this work, which enables us to meet the most exacting requirements of the trade promptly.

ORDERS AND CORRESPONDENCE SOLICITED.

DAWSON ROLL WORKS CO.

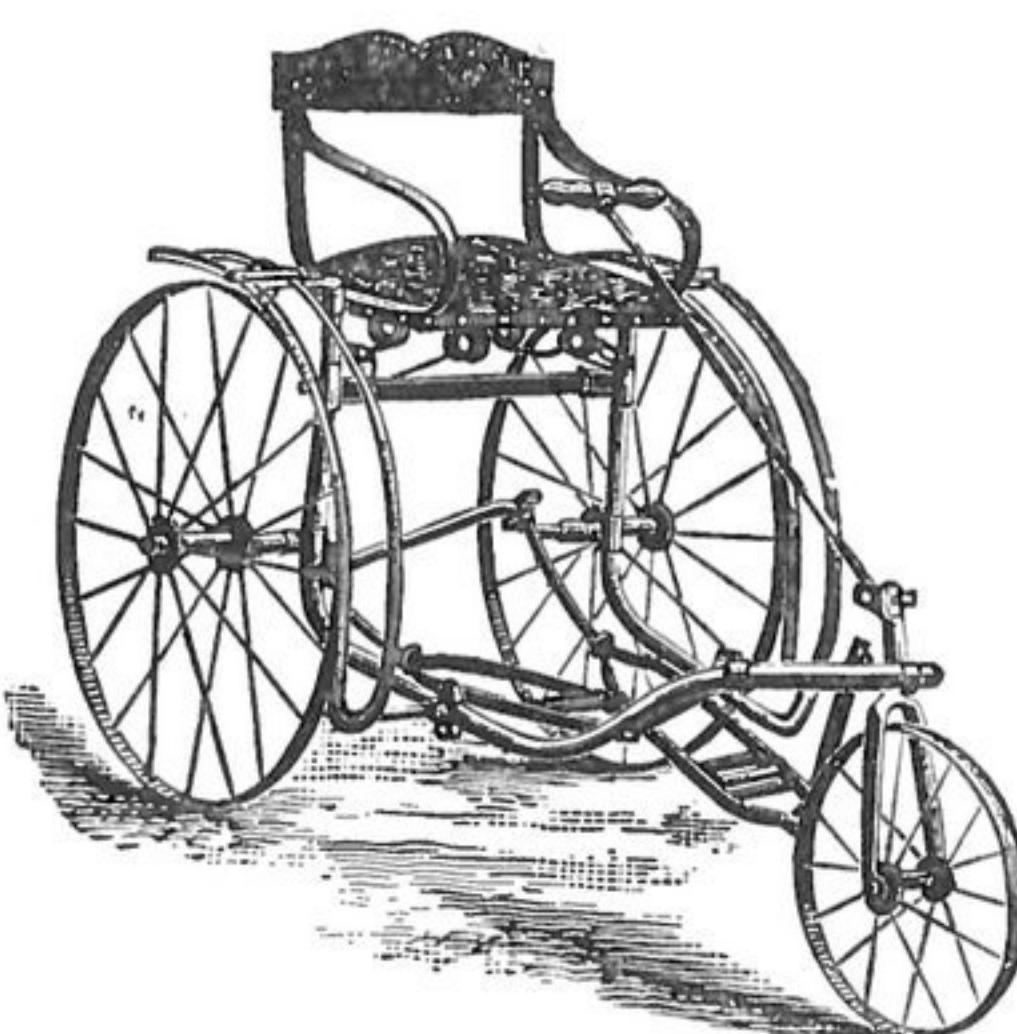
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HARRISBURG, PA.



BEST STEEL SAFETY MADE FOR

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Easiest LADIES' Tricycle Known

Our Tricycles the Only Machine ever Recommended by Physicians for Ladies and Girls of a Delicate Constitution.

THE BUFFALO TRICYCLE CO.

Manufacturers of Ladies' and Girls' Tri-cycles, Ladies' and Boys' Safety Bicycles, Etc., Etc.

640 Linwood Ave., **BUFFALO, N. Y.**
SEND FOR CATALOGUE AND PRICES.

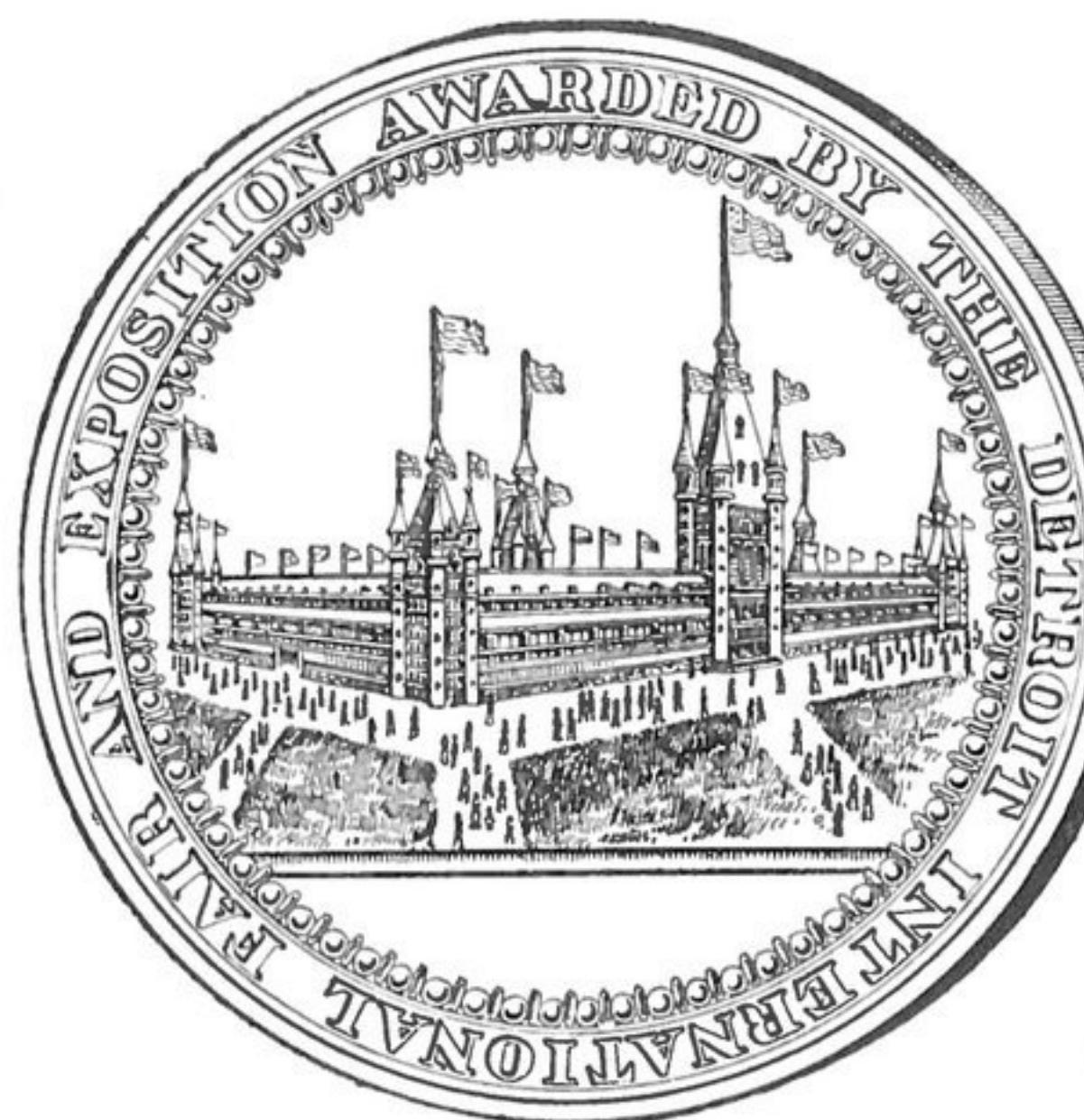
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FREE BUS TO ALL DAY TRAINS.

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BUY THE BEST.

Satisfaction Guaranteed.

WRITE FOR CATALOGUE, PRICES,
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AMERICAN INJECTOR CO., NO. 175 Larned St., West, DETROIT, MICH.

MILLING WORLD

AND
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets, Buffalo, N. Y.
McFAUL & NOLAN, - - - PROPRIETORS
THOMAS MC FAUL. JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application. Advertisements of Mills for sale or to rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD, BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

SITUATION WANTED.

Head miller with over 20 years experience want to make a change this spring. Address, A. MILLER, 67 Weaver Alley Buffalo, N. Y.

4t

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

WANTED, TO RENT.

A good Custom Mill, in a good grain section. Steam or water power. Address, MILLER, P. O. Box 170, Pocomoke City, Worcester County, Md.

252

FOR SALE AT A BARGAIN

I have a half interest in a Short System Roller Mill which I will sell at a bargain. Don't write unless you mean business. Address, GEO. FOSTER, Wakeman, O.

47

FOR SALE.

One No 1 Howes, Babcock & Co., Silver Creek, N. Y., Lengthened Scourer and Smutter, nearly new. Address, CHAS. SCHOEPLIN & BRO., Gardenville, N. Y.

46

FOR RENT.

Clinton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 311 Main Street, Buffalo, N. Y.

6tf

FOR SALE

Rare chance, Grist, Saw, Planing Mill, Lumber and Coal Yard, doing good business. Growing village; 15 miles from Washington. Owner wishes to retire. Small capital needed. Terms easy. A. FREEMAN, Vienna, Va.

37

FOR SALE

Whole or part of a 125-barrel Flouting Mill, built entirely new from ground up. Equipped with latest machinery. Side track at mill door. Located in South Michigan. The Big local and exchange trade. For further particulars address B. B., care of THE MILLING WORLD.

37

FOR SALE

Flour and saw-mill with or without farm of 38 acres. Four buhr mill, with machinery and building in most excellent condition. Buildings on farm good. Good run of custom. Can run by water 9 months, also have steam power. Terms easy. On Big Indian Creek, $\frac{1}{4}$ -mile from Crandall, on Air Line. Mrs. C. KRACKMAN, Crandall, Ind.

36

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
One 20-Inch Portable Mill.
One 18-Inch Double Gear Portable Mill.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y.

5tf

FLOUR MILL WANTED.

Flouring-mill wanted at Evart, Osceola Co., Mich. Good wheat region, large territory. Correspondence solicited. GEO. W. MINCHIN, Evart, Osceola Co., Mich.

69

FOR SALE AT A GREAT BARGAIN.

The Reist Roller Mill, at Williamsville, 4½ miles from Buffalo city line. Eighteen acres of land, with dwelling houses, twenty-two feet fall stone dam, Leffel Turbine water wheels, water the year round, steam power to assist in extreme dry seasons. Nine set 9x18 Stevens Rolls, two run of stone, three George T. Smith purifiers, grain-cleaners, scalping and bolting capacity for 80 to 100 barrels per twenty-four hours, etc., etc. Title perfect, bought at Sheriff's sale. Mill was mortgaged for \$18,000; will sell for \$5 500, without regard to loss, as I am no miller, but engaged in other business. The quick buyer will secure a great bargain. Address, WILLIS B. MUSSER, La Caster, Pa., or my attorneys, BAKER, SCHWARTZ & DAKE, Esqs., Hayen Building, Buffalo, N. Y.

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MILLERS will not complain at the McKennan-Acheson decision against the Consolidated Roller Mill Company. Wonder if the Consolidated or National people will complain? It is the case of the miller against the avaricious.

THE National Association of French Millers shows a list of over 3,000 active members. Evidently in France a "national" affair is really "national." Wonder if the French millers vote as men, or as flour-barrels, in their conventions? Why can not the Millers' National Association of the United States get vaccinated with the French genius for administering and popularizing a millers' association? The "National" might send ex-Secretary Seamans or Willie Edgar over to Paris for the vaccination. It would pay.

EVIDENTLY all the members of the Pennsylvania Millers' State Association are not thoroughly posted on the relations between the Millers' National Association and the milling press. For instance, one of them, Mr. McFeely, in a reference to the National, when the question of affiliation was discussed in the late Reading convention, said of that body: "The millers' journals are down on it, except one which is paid by the National." Now this is not correct. The "one" referred to is the Minneapolis "Yahoo," but there are two other journals which support the National. One of them is a milling journal, "The Modern Miller," and the other is the "United States Miller and Milling Engineer." The former is published in Kansas City, the latter in Milwaukee. These are the three journals that are outspoken in their support of the National, and even one of these, the Minneapolis "Yahoo," seems to think that the National might be improved upon, as it recently took occasion to say: "Frankly, the Millers' National Association is not filling the bill, and the question for its executive committee to settle is whether it can be made to do so or not." Something must be rotten in the National Denmark when even the "Yahoo" can see flaws in its parent body.

AGAIN some of our esteemed, but profoundly misinformed, contemporaries are astray on Niagara Falls and the new tunnel that is being bored there. They are stating that the "tunnel is destined to utilize a fraction of the power running to waste in the great cataract." The statement reads well, but it is a misstatement. The tunnel does not touch the great cataract at all. It starts in at a point on the Niagara, above the falls, and it ends in the gorge below the falls. It is merely a slant tunnel, and the slant gives the current and the power that will be utilized. Esteemed contemporaries should be exact in matters of such size and importance. There will be no flouring-mills on Goat, Luna, Porter, Bath or any other island above the cataract, and not a particle of power will be taken from the cataract itself. Instead of being ignobly "harnessed" to grind flour and do other hard work, the Niagara cataract will continue in business at the old stand, pounding away sublimely for the delectation of aesthetic sightseers from all parts of the earth. Niagara is a long-system hustler, and the new tunnel will not disturb its sublimity in the least. Another thing: The fall is not in Buffalo. Some far-away journals speak of Buffalo and Niagara Falls as though they were so close together that Buffalo babies, allowed to toddle out in the back-yards, are invariably in the habit of tumbling into the river and going over the falls. The great cataract is a good 20 miles distant from the center of Buffalo.

THE FRUIT OF THE TREE.

A. B. SALOM.

RECENT events have seriously discredited one of the most prominent of the labor organizations in the United States. The strike of that organization, the Knights of Labor, on the New York Central Railroad is a matter of history. It was a typical strike. It was ordered at an unfavorable time, on foolish grounds, by irresponsible men, without hope of success from the beginning. It was fought with instruments that ought to be unknown in a civilized country or community, instruments of lawlessness, of disregard of public, private, individual and collective rights, of intimidation and terrorizing, of threats and boycotts, and of every conceivable allied form of disorder. It proclaimed bombastic theories of right and wrong, of justice, of personal privileges, of labor's sacredness and of capital's incorrigible badness and tyranny, and while proclaiming all these things, it was fighting with the weapons of savagery and aiming to ruin that which it could not rule.

Defeat, prompt, galling, hopeless, followed. Public sentiment upheld the corporation that refused to surrender its affairs to men whose ideas of governing include the murder of the men who do not think with them, and the destruction of the property and business which they can not control to their liking. The preposterous claims of the demagogues who misrule the order were squelched. The strikers, having fought a desperate fight with lawless weapons, and having lost, became weeping supplicants for the positions which they had, without cause, thrown away. The defeated desperado became the whimpering coward, when want smote him and the stern lesson of the senseless strike was forced home to him. The lofty vaunt of the leaders was lost in the gnawings of hunger, and the defeated striker was ready to forsake the leader for a chance to get again the position he had thrown away. The "walking delegate" was at a discount. The tree of the strike was bearing bitter fruit.

Suddenly the evil spirit of the strike appeared in a new form. A deliberate attempt was made to wreck the passenger trains on the Central road. Civilized individuals were horrified. From one end of the land to the other the dastardly crime was denounced. Investigation followed. The social eye was opened to the dangers that are growing around and in the social body. The perpetrators of the crime were discovered and arrested. They were strikers. They were Knights of Labor. Like all other men who are prone by nature to lawless methods and instruments, these desperate criminals are abject cowards, and so soon as they felt the stern hand of the outraged law upon them, their cowardice overwhelmed them. They confessed their crime in all its shocking details, unconsciously showing how their minds, so long filled with the wild vaporings of the demagogues who mislead them, became so distorted that any desperate deed committed to gain their ends seemed to them perfectly legitimate. Murder of innocent men, women and children seemed to them a perfectly proper mode of "getting even" with the corporation that had refused to be controlled by them and their desperate colleagues. Destruction of property, maiming of bodies, the entailing of untold misery on the community seemed to them correct and legitimate methods of ruining what they had failed to rule.

The community was shocked. Why? The revelation of this particular conspiracy ought to surprise or shock no intelligent observer who has studied the tendencies of these organized conspirators for years. The tree has been growing in open sight. The public eye has at all times been able to trace its growth. Over-indulgent public sentiment has encouraged conspiracy. The newspapers of the land, fearing the mysterious boycott, have gone out of their way to commend it, or to apologize for it. Busy men have refused to believe that the conspiracy was becoming dangerous in aim, or in membership, or in instrumentality. The fruit of the tree has been gathered at intervals, and it was always bitter fruit, but the community refused to believe that it was as bad as it seemed. In the assemblies of these conspirators all sorts of wild vagaries were taught. Ignorant men were led to believe that capital is the sworn foe to labor, tha-

money is a crime, that wealth is inexcusable, that labor should have all it produces, that wages are only a small portion of what is due to labor, and that any and every wrong or outrage committed by labor on capital is justifiable. How far and how fully these fatal and chaotic doctrines possess the rank and file of certain organizations can be appreciated only by men who have talked with the members and learned from them the dangerous direction in which banded labor is advancing. The tree has been growing by perfectly natural processes all the time. The fruit has been matured on natural lines.

What came as a terrible shock to the community, in the fiendish attempt of these desperate men to kill scores of innocent human beings in no way connected with their strike and its failure, should have been expected. The community that allows evil trees to grow should expect to gather evil fruit. The venomous snake has thriven openly on riot, murder, arson, boycotting and intimidation. Legislators feared to scotch it. Newspapers feared to expose it. The conspirators have propagandized openly, and not an element in the community has dared to meet them in public. It was perfectly natural that the desperate demagogues should take it for granted that they were as omnipotent as they claimed to be. The immunity from criticism they enjoyed made them bolder and more desperate. Whenever their banner was raised, tumult followed. All the crazy anarchists, socialists and revolutionists flocked by instinct under the dangerous flag of the demagogues. The community failed to see the danger. The outbursts were regarded as mere incidents, not as the regular and inevitable results of bad teaching by bad men. It required something severe to open the eyes of all citizens to the true character of the men who have been cultivating the strike tree. At last the fiendish spirit of these conspirators is being revealed so clearly that the community can not fail to understand it. The wretched criminals who have confessed themselves wreckers and murderers are no worse than the majority of the men in their order. Let the American public keep an open eye on all these orders that are formed to revolutionize the world by arson, maiming, robbery, boycotting and murder. They are hotbeds of crime. They retard the progress of true, honest, law-abiding labor and bring a reproach upon the name of labor. They are the evil tree, and the community should prevent the fruiting that means death and ruin to all legitimate interests.

ANOTHER IMPORTANT DEFEAT.

Another adverse decision has fallen upon the Consolidated Roller Mill Company. On the 15th of September the case of the Consolidated Roller Mill Company against R. R. Walker, for infringement, was heard before Judges McKenna and Acheson in the United States Circuit Court for the Western District of Pennsylvania, and the decision was against the Consolidated. Following is the full text of the decision:

The bill in this case charges the defendant with the infringement of two patents relating to roller-mills, one issued to William D. Gray, and the other to Udolpho H. Odell; but, at the final hearing, the suit was pressed only as respects the former patents, and hence the Odell patent may be dismissed from consideration. The patent to William D. Gray is No. 228,525, and was granted June 8, 1880, upon an application filed May 2, 1879. Gray's invention relates to that class of mills in which horizontal grinding-rolls arranged in pairs are employed, and consists, the specification declares, "in the improved arrangements of belts and pulleys for communicating motion to the rolls, and in other minor details." The patent contains several claims, but infringement of the first claim only is hereby charged. That claim is in these words: 1. "In a roller mill, the combination of the counter-shaft provided with pulleys at both ends and having said ends in vertically and independently adjustable bearings, the rolls C B having pulleys connected by bolts with one end of the counter-shaft and the rollers D F independently connected by belts with the other end of the counter-shaft, as shown."

The answer set up, among other defenses, want of novelty

and want of patentability, and non-infringement. After stating in his specifications that driving the wheels by gearing occasions great noise, and also a jarring of the parts of the apparatus and trembling of the mill-floor, in turn causing unevenness in grinding and a rapid or uneven wear of the rolls, Gray adds: "To obviate these difficulties and produce an even, steady motion, I discard the gearing hitherto employed, and substitute therefor a system of belting arranged in a peculiar manner to give the proper direction and speed to the rolls," and he mentions as incident to his arrangement of belting the further advantage that, by simply removing the pulley of any shaft and replacing it with another of proper size, any desired difference in the speed of the rolls may be obtained, which, he states, can not be accomplished except by a complicated arrangement of intermediate wheels, where gearing is used.

The specification after referring to the accompanying drawing explains the arrangement of belts thus: "N represents the main driving-belt, which pass to and around the pulley *c* of the roll C, thence downward and around pulley *b* of the counter-shaft B, thence upward and around pulley *e* of the roll E, and back to the source of power, imparting to the rolls C and E a motion in the reverse direction. From the pulleys *bb* on the rear end of the counter-shaft B belts P and R pass upwards and around pulleys *d* and *f* of the rolls D and F, as shown in figure 2, imparting to said rolls a motion the reverse of that of the rolls C E. In this way the two rolls of each set are caused to revolve towards each other while being all driven from a common source primarily." To understand fully the particular claim of the patent involved in this controversy, one other paragraph of the specification must be quoted: "In order to adapt the counter-shaft B to perform the double purpose of reversing the motion of certain rolls and of acting as a belt-tightener, it is mounted, at opposite sides of the frame or body A, in boxes swiveled or hung in yokes L, sliding vertically in guides or boxes K, and adjusted up and down therein by screw-rods and stems S, the swivel-boxes permitting a slightly greater movement of the shaft B at one end than at the other without interfering with its free rotation, and thereby permitting the tightening of the belt or belts at one side of the machine without disturbing those at the other."

Gray's specification, as our quotations therefrom indicate, suggests the idea that he was the first to apply belt-drivers to roller grinding-mills. But the fact is otherwise, as the proofs abundantly show. Nor was he the first to discard from such mills cog-gearing and friction-gears altogether, and substitute therefor belt-driving. Confining our attention here to Mechwart's Austrian patent, granted August 3, 1875, we find therein distinctly set forth the disadvantages resulting from the use of spur-gearing in roll or grinding-mills, viz: The disagreeable rattling, their rapid wearing away of the gears, and the unequal movement and the unequal wearing away of the rollers, and also the inefficiency of driving by means of frictional contact between the rolls, which latter, it is set forth, is only practical when the chop passes the rollers in very thin layers and not in coarse particles, and is not applicable when an unequal peripheral speed of the rolls is acquired. All these disadvantages, it is declared, are avoided by Mechwarts' invention, which consists in driving both co-operating rolls by means of belts, whereby also can be obtained an equal and also an unequal peripheral speed, while the diameter of the rolls, as well as the diameter of the belt pulleys, can be varied relatively to each other for different objects. Mechwart's drawings show as examples six different arrangements of belting, which, he states, are intended to illustrate only some of the different arrangements of the belt-drive for roller mills, without exhausting the possible variations in its application.

Figure 3, sheet A, shows a machine having two pairs of grinding-rolls, the pairs being vertical and arranged side by side. A shaft mounted in the machine-frame in fixed bearings carries two pulleys, one at each side of the machine. A belt from one of these pulleys passes around a tightening pulley at the upper right-hand corner of the machine, thence around a pulley on the upper left-hand roll-shaft, thence

around a pulley on the lower left-hand shaft, and thence back to the driving-pulley, and by this belt one roll of each pair is driven. From the other pulley on the other side of the machine a belt is arranged in a similar manner so as to drive the other two rolls of the pair. Without further description of the Mechwart system, it is enough to say that his patent disclosed a roller grinding-mill, single and double, with both vertical and horizontal pairs of rolls arranged side by side, driven by means of belts exclusively; his machine being equipped with adjusting or tightening pulleys, and having a shaft journaled directly into the machine-frame and receiving its motion from the prime mover of the mill, either directly or by belt.

But, turning now to machinery employed in the arts generally, it is certain that the use of belt-gearing interchangeably with or as a substitute for cog-gearing was very old and common before Gray's alleged invention. It was, too, an old and familiar expedient to keep the belt adjusted to a proper degree of tightness by means of tightening pulleys, the shaft of which in revolving sometimes did other work about the machine; and shafts had been made movable in such manner as to tighten belts passing over pulleys on other shafts. It was also old and very common in machine-shops and factories of various kinds to provide an individual machine with a counter-shaft mounted directly in the machine-frame, the counter-shaft being driven by the belt from the line-shaft and the machine by a belt from the counter-shaft. Furthermore, it was no new thing to provide the journal-box or hangers in which counter-shafts are mounted with means for independently adjusting the ends of the shaft.

In view of these things, then, we are unable to discover any patentable subject matter in the first claim of Gray's patent. The case, it seems to us, falls directly within the established principle that the application of an old process, machine or device to a like or analogous purpose, with no change in the mode of application, and no result substantially different in its nature, will not sustain a patent, even if the new form of result has not before been contemplated. Moreover, it is quite clear that the application of belting to drive roller grinding-mills, to obviate the difficulties incident to the use of cog-gearing and to secure the advantages set forth in Gray's specification, did not originate with him, therefore, even were it conceded that his peculiar arrangements were attended with better results than had been attained previously, still this would not sustain the patent, for the mere carrying forward of an original conception, resulting in an improvement in degree simply, is not invention. After the most careful study of the subject, we think the conclusion is unavoidable that the combination set forth in Gray's first claim evinces only the exercise of ordinary mechanical or engineering skill, as the same has been defined by the Supreme Court and illustrated by so many recent decisions of that tribunal.

It seems to be proper for us to add that our judgment is with the defendant upon the defense of non-infringement, also to understand the nature of the invention intended to be covered by the first claim resort must be had to the specifications, and we there find that the "swivel-boxes" are essential to the contemplated greater movement at one end of the shaft than at the other, whereby is effected "the tightening of the belt or belts at one side of the machine without disturbing those at the other." This is apparent on the face of the paragraph hereinbefore quoted at length, and the expert testimony is direct and convincing that to the working of the described device as a belt-tightener this swiveling feature is indispensable. Without the swivel-boxes Gray would not have "independently-adjustable bearings." True, those boxes are not expressly mentioned in the claim, but we think they are to be regarded as entering therein by necessary implication, for the reason just stated as well as by force of the words "as shown." Moreover, the prior state of the art would limit the claim to the specific organization shown and described. But that organization the defendant does not use. His alleged infringement consists in the use of a roller-mill manufactured under and in accord-

ance with letters patent No. 334,460, granted January 18, 1886, to John B. Obenchain. In the defendant's machine the journal-boxes are rigidly supported so as to be always horizontal and incapable of any tilting or swiveling motion, and this is essential to the working of the apparatus. A continuous counter-shaft is not employed, but three coupled base-shafts, the outer shafts or sections being each journaled at the outer end in a vertically-adjustable non-swiveling box, and the inner end of each being forked and carrying a loosely pivoted ring. These two rings are connected by a tumbling-rod forked at each end and pivoted to the rings, thus forming a universal coupling; and thereby, through the central shaft or tumbling-rod, rotary motion is transmitted from one of the end shafts or sections to the other, no matter how much they may differ in vertical position.

Now, for reasons already given, we are of the opinion that such a construction of Gray's first claim as would embrace the Obenchain device is inadmissible. The foregoing views being the devise of the case, we deem it unnecessary to consider the other grounds of defense. I am authorized by Judge McKennan to state that he concurs in the conclusion announced in the foregoing opinion. Let a decree be drawn dismissing the bill of complaint, with costs.

SOME BEASTLY POETRY!

MAGENDIE'S DOGS—RONDEAU.

Magendie's dogs! Examples queer
To fill the breast of man with fear
In interest of the fad of bran,
To please the cranky "whole meal" clan!
Full 40 days white flour did steer
Into some dogs—no meat, no beer—
And then, alas!—come, shed a tear—
Their vital spark right out did pan.
Magendie's dogs!
But other dogs in live career
As "whole meal" samplers did appear,
On which they throng in wondrous plan,
And now, dished up as food for man,
The cranks present us every year
Magendie's dogs!

Duluth, Minn., October 17, 1890.

BANG.

COTEMPORARY COMMENT.

The business of estimating the world's crops is not so closely or perhaps so ably followed in America as is the case in Europe, and possibly for the reason that the fate of the crop estimator, under our present system of agricultural reports, may be said to be as uncertain as that of the party whose fortunes hang on princes' favor. It can safely be said that the volume of opinion in America now leans to the supposition that this country will export a comparatively small surplus. Yet it has to be remembered that a comparatively small surplus may mean a great many millions of bushels, and that, after all, but little is as yet known of the size or quality of Russia's crop, a factor of superlatively weighty importance in determining the relative value of our own. The same is true of the crop of France, from which reports are just now various and conflicting.—*Chicago Daily Business.*

Willie will not die a' mournin'. A natural revulsion has set in, due to a bubbling over of vitality. From weeping over the relict, *La Panaderia Espagnola*, he has fallen to tearing his hair and cursing all the A. M. J.'s in this and subsequent kingdoms. Willie, this will not do. Such a spirit will inevitably eternally separate us. The A. M. J.'s will go to a place where swearing and cursing is strictly prohibited, and you will be left alone, entirely alone, with not even a baker's or confectioner's sheet to relieve the terrible monotony of your existence in the ovens of *La Panaderia*. Think of the horrors of this situation, Willie. There will be no more fun when you are gone!—*Indianapolis Millstone.*

The fall-sown wheat has been doing well. The temperature has been high enough to maintain rapid growth as a rule, and in various instances insect pests have developed, but as yet not to an extent essentially to impair the generally excellent start which the crop now has. It may be

reasonably assumed that long continuance of conditions favoring unseasonable growth of the wheat plant will tend to enlarge development of the fly, and consequent injury.—*Cincinnati Price Current.*

AGRICULTURE AND PROTECTION.

American farmers are informed by European economists that "protection is ruining American agriculture, by forcing farmers to pay more for what they have to buy, and to take less for the produce they have to sell." How does this European free-trade assertion square with the facts? Let figures answer. Following is a table which shows the purchasing power of farm products during five years of free-trade, ending in 1850, and five years of protection, ending in 1880:

Purchasing Power of Farm Produce.	Salt, sacks.	Coal, lbs.	Prints, yds.	Pig-iron, lbs.	Bar Iron, lbs.	R. R. Iron, lbs.	Bl. sheeting, yards.
1 bushel of wheat would buy—							
Under Free-Trade.....	0.91	422	12.21	107.3	35.8	47.23	8.51
Under Protection.....	1.80	719	16.27	134.0	57.35	72.6	11.04
1 bushel of oats would buy—							
Under Free-Trade.....	0.31	168	4.20	36.94	12.33	16.26	2.98
Under Protection.....	0.536	240	4.89	39.86	17.07	21.63	3.27
10 lbs. of butter would buy—							
Under Free-Trade.....	1.112	597	14.92	131.0	43.74	57.69	10.39
Under Protection.....	3.417	1530	31.04	254.0	108.82	137.87	20.95
10 lbs. of cheese would buy—							
Under Free-Trade.....	0.474	250	6.28	55.02	18.37	24.23	4.36
Under Protection.....	1.376	619	12.52	102.36	43.82	50.53	8.43
1 lb. of wool would buy—							
Under Free-Trade.....	0.264	141	3.54	31.06	10.37	13.68	2.46
Under Protection.....	0.661	296	6.00	49.16	21.64	21.08	4.05
10 lbs. Ky. Tobacco would buy—							
Under Free-Trade.....	0.431	231	5.79	50.82	16.97	22.34	4.03
Under Protection.....	1.117	526	10.66	87.33	37.38	47.37	7.19

POINTS IN MILLING.

ACCORDING to the published report of the convention of Pennsylvania millers in Reading several weeks ago, one "short" mill builder present, in answer to a direct question, openly stated that the short system of milling calls for 4:40 of grain to the barrel of wheat flour. Now let the same question be put to long-system builders, or, rather, to long-system millers. If the latter will answer fairly, squarely, honestly, there is little doubt that they will confess to 4:40 rather than any lower figure. I have recorded scores of answers to this question in my note-book, answers made by both long and short millers, and a lower figure than 4:40 is rare among the answers. A few call for 4:35, still fewer for 4:30, and only three or four out of a hundred go below 4:30. Far the greater number call 4:38 to 4:45 the proper average.

BIG yields, 75, 80 and 85 per cent., are fine subjects for boasting, but they are almost as rare as hens' teeth. Most millers have come to the conclusion that big yields, that is to say, the extraordinary big yields claimed by some builders of mills and milling-machines, are to be found only on paper, that they are not in the wheat, in the rolls, in the purifiers, or in the packers in actual milling. Only three years ago there was a "big-yield" craze, and wild claims of 4:2 up to 4:12 were common. These figures mean 80.99 per cent. to 77.94 per cent. of flour, and to-day there is nobody bold enough to advance such claims in the expectation of finding believers.

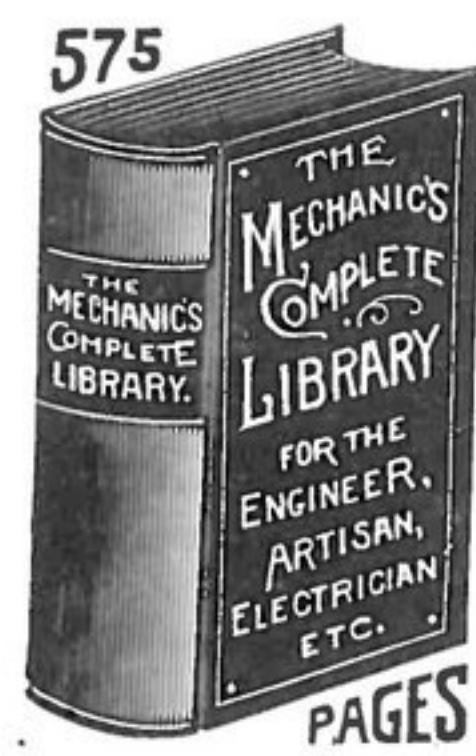
FURTHERMORE, with the average mill, running along steadily, with the usual "ups and downs" and "offs and ons" in the quality of the wheat that comes into the mill, with the machinery grinding better and better from brand-newness up to a certain point, and grinding worse and worse thereafter down to hopelessly bad work, it will require a very competent miller, with the best of assistants and the finest of machines well cared for always, a very high average grade of grain, and ceaseless vigilance to keep a year's work even as low as 4:40. Millers of experience with rolls, from the date of their adoption in the United States, who

have made a study of yields for years, are very slow to boast of big yields. Experience has taught them caution.

SPRING-WHEAT grinders have got a bad grist on this crop to grind. The wheat from the Northwest is "off" by several grades for the bulk of the crop. The "offness" refers mainly to the condition of the grain for milling. Reports from bakers seem to indicate that the new flour is "all right for bread-making." The chemical make-up of the berry is correct, but the mechanical make-up is of such a character that the miller will have extra work to extract the flour. The difference in quality between the wheat of this crop and that of last crop is thought to be great enough to make it necessary to use at least 10, and perhaps 15, pounds more of grain to the barrel of flour. With wheat at the present figures, the addition of 15 to 30 cents to the cost of a barrel of flour will cut an important figure in the ledgers of the millers at the end of this crop.

Good Housekeeping, which has hitherto been published as a fortnightly, will soon discard that rather inconvenient arrangement and fall into line as a monthly, taking a magazine form. Some new features will also be introduced, among which mention may be made of a series of articles on "Ten Mornings in the Kitchen," by Miss Parloa. The number for October 25 ends the 11th volume, concluding, also, the valuable series on "The Head, the Hands, the Feet," which has been running through a dozen numbers. The publishers, Clark W. Bryan & Co., Springfield, Mass., show a laudable determination to advance the merit and the popularity of this already admirable home visitant.

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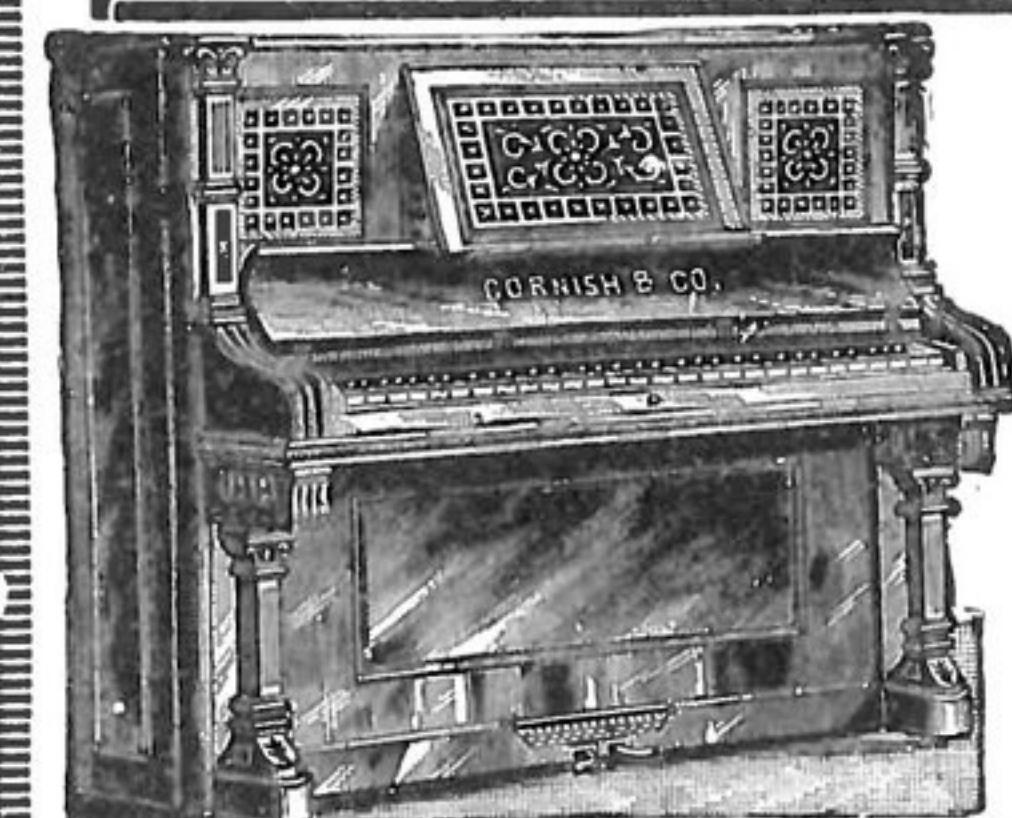
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GENERAL NOTES.

PROBABILITIES of life and death at various ages are set down as follows by one insurance actuary: One-half of the number of persons who have completed their tenth year die before they reach 50.1 years, while the other half live beyond that age. Among girls who have completed the age of 10, one-half die before, the other half after 52.9 years have been reached. Persons of 0 years mean children who have not reached the age of one year:

Age.	Probable Duration of Life.		Probable Duration of Life.	
	Male.	Female.	Male.	Female.
0	38.1	42.5	55	14.6
5	53.9	56.8	60	11.5
10	50.1	52.9	65	8.8
15	45.6	48.4	70	6.5
20	41.2	44.0	75	4.7
25	37.2	39.7	80	3.3
30	33.2	35.6	85	2.4
35	29.2	31.6	90	1.8
40	25.3	27.6	95	1.4
45	21.6	23.5	100	1.0
50	18.0	19.6		0.9

ESTIMATED YIELDS AND AVERAGES.

Millers will be interested in the following table, which shows the acreage of wheat in the different States, mainly based on percentages reported to the Department of Agriculture, and computations of the yield in different States made from the returns of threshers to the National Department of Agriculture, compared with the official report of the yield in 1889:

States. Winter.	1890 Acreage.	1890 Est'd Y'ld, bu.	1889. Yield, bu.
Ohio	2,398,000	29,975,000	36,865,000
Michigan.....	1,452,000	22,070,000	23,709,000
Indiana.....	2,494,000	23,693,000	41,187,000
Illinois.....	2,805,000	20,757,000	38,014,000
Missouri.....	1,524,000	17,069,000	20,639,000
Kansas.....	1,831,000	24,718,000	30,912,000
Kentucky.....	924,000	8,500,000	10,811,000
Tennessee.....	1,174,000	4,813,000	9,085,000
Connecticut	1,800	29,000	30,000
New York.....	634,000	9,637,000	8,929,000
New Jersey.....	137,000	1,670,000	1,711,000
Pennsylvania.....	1,335,000	16,020,000	16,617,000
Delaware.....	96,000	931,000	1,100,000
Maryland.....	535,000	6,206,000	6,171,000
Virginia.....	785,000	5,652,000	6,804,000
North Carolina.....	717,000	3,155,000	4,492,000
South Carolina.....	178,000	748,000	1,191,000
Georgia.....	333,000	1,365,000	2,383,000
Alabama.....	279,000	1,256,000	2,502,000
Mississippi.....	58,000	348,000	494,000
Texas	451,000	2,706,000	6,189,000
Arkansas.....	212,000	1,505,000	1,794,000
West Virginia.....	302,000	2,325,000	3,144,000
California.....	2,634,000	31,608,000	43,781,000
Oregon.....	870,000	13,050,000	13,689,000
Total.....	23,159,800	249,806,000	332,243,000
Spring.			
Minnesota.....	3,673,000	44,076,000	45,456,000
Wisconsin.....	1,157,000	14,452,000	16,937,000
Iowa.....	1,670,000	19,539,000	21,023,000
Nebraska.....	1,475,000	16,668,000	16,848,000
Dakota	4,209,000	37,881,000	41,652,000
Colorado.....	96,000	1,776,000	1,851,000
Washington	436,000	9,028,000	6,856,000
Nevada	18,900	309,000	335,000
Idaho.....	82,200	1,011,000	1,449,000

Montana	86,700	1,933,000	1,539,000
New Mexico.....	90,600	1,495,000	1,096,000
Utah.....	129,000	2,541,000	1,880,000
Arizona.....	25,900	311,000	337,000
Maine.....	38,600	521,000	589,000
New Hampshire.....	9,000	138,000	144,000
Vermont.....	19,000	327,000	325,000
Total.....	13,215,900	152,006,000	158,317,000
Grand total.....	36,375,700	401,812,000	490,560,000

Following is a table showing the "average" yield of wheat per acre, indicated by the returns of threshers, in the different States in 1889 and 1890:

States. 1890.	Yield.		States. 1890.	Yield.	
	Bu.	Bu.		Bu.	Bu.
Ohio.....	12.5	14.6	W. Virginia.....	7.7	10.2
Michigan.....	15.2	14.7	California	12.	13.3
Indiana.....	9.5	14.7	Oregon.....	15.	16.2
Illinois.....	11.5	16.	Minnesota	12.	14.6
Missouri.....	11.2	13.	Wisconsin.....	12.5	14.2
Kansas.....	13.5	18.4	Iowa.....	11.7	13.1
Kentucky.....	9.2	11.	Nebraska.....	11.3	12.
Tennessee.....	4.1	7.5	Dakota	9.	9.4
Connecticut.....	16.1	15.5	Colorado.....	18.5	21.2
New York	15.2	13.8	Washington.....	23.	17.
New Jersey.....	12.1	12.2	Nevada	18.3
Pennsylvania.....	12.	12.3	Idaho.....	12.3	17.8
Delaware.....	9.7	11.6	Montana.....	22.3	18.1
Maryland.....	11.6	11.3	New Mexico.....	16.5	12.7
Virginia	7.2	8.4	Utah	19.	15.3
North Carolina.....	4.4	6.2	Arizona.....	12.	13.
South Carolina.....	4.2	6.	Maine.....	13.5	14.2
Georgia.....	4.1	6.3	New Hampshire.....	15.3	15.4
Alabama.....	4.5	7.	Vermont	17.2	16.5
Mississippi.....	6.	6.5	Average yield ...	11.1	12.8
Texas.....	6.	10.3			
Arkansas	7.1	7.6			

As usual these "averages" misrepresent more than they represent. Sent abroad, they are construed by the world to mean that the various States are capable of yielding only these amounts of wheat per acre, and that the United States, on the whole, ranks but little above India as a wheat-growing country so far as average yields are concerned. Eastern Washington reports wheat yields of 40 to 60 bushels per acre over areas covering thousands of square miles, barley yields of 80 bushels, flaxseed yields of 14, and oats 60 up to 101 bushels per acre. None of these yields appear in the misleading "average" table, and a great injustice is done to whole agricultural regions that, from their position, ought to be treated alone in a showing intended to record their capabilities.

MILLING PATENTS.

Among the patents granted Oct. 21, 1890, are the following:

The Sleepy Eye Roller Mill Co., Sleepy Eye, Minn., registered trade-mark No. 18,547, wheat flour: "The words 'Old Sleepy Eye,' in connection with the representation of an Indian's head."

Samuel Hughes, Charleston, S. C., Nos. 438,728 and 438,729, a grinding-mill.

Nathan F. Burnham, York, Pa., No. 438,878, a turbine water-wheel.

Walter H. Robinson, Hickson, N. D., No. 438,948, a combined sack-filler and scoop, one-half assigned to Mattie F. Davis, Fargo, N. D.

John H. Poulter, Arcola, Ill., No. 439,024, a grain-weigher.

CATARRH.

CATARRHAL DEAFNESS—HAY FEVER.

A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate.*

Sufferers from Catarrhal troubles should carefully read the above.

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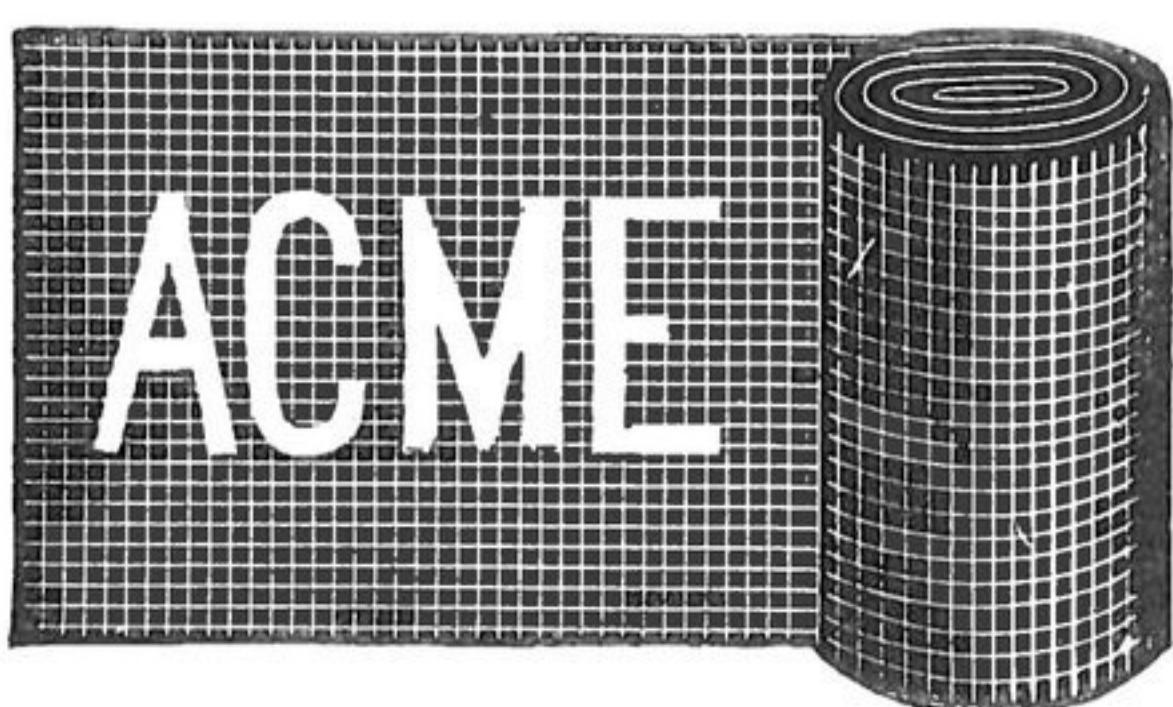
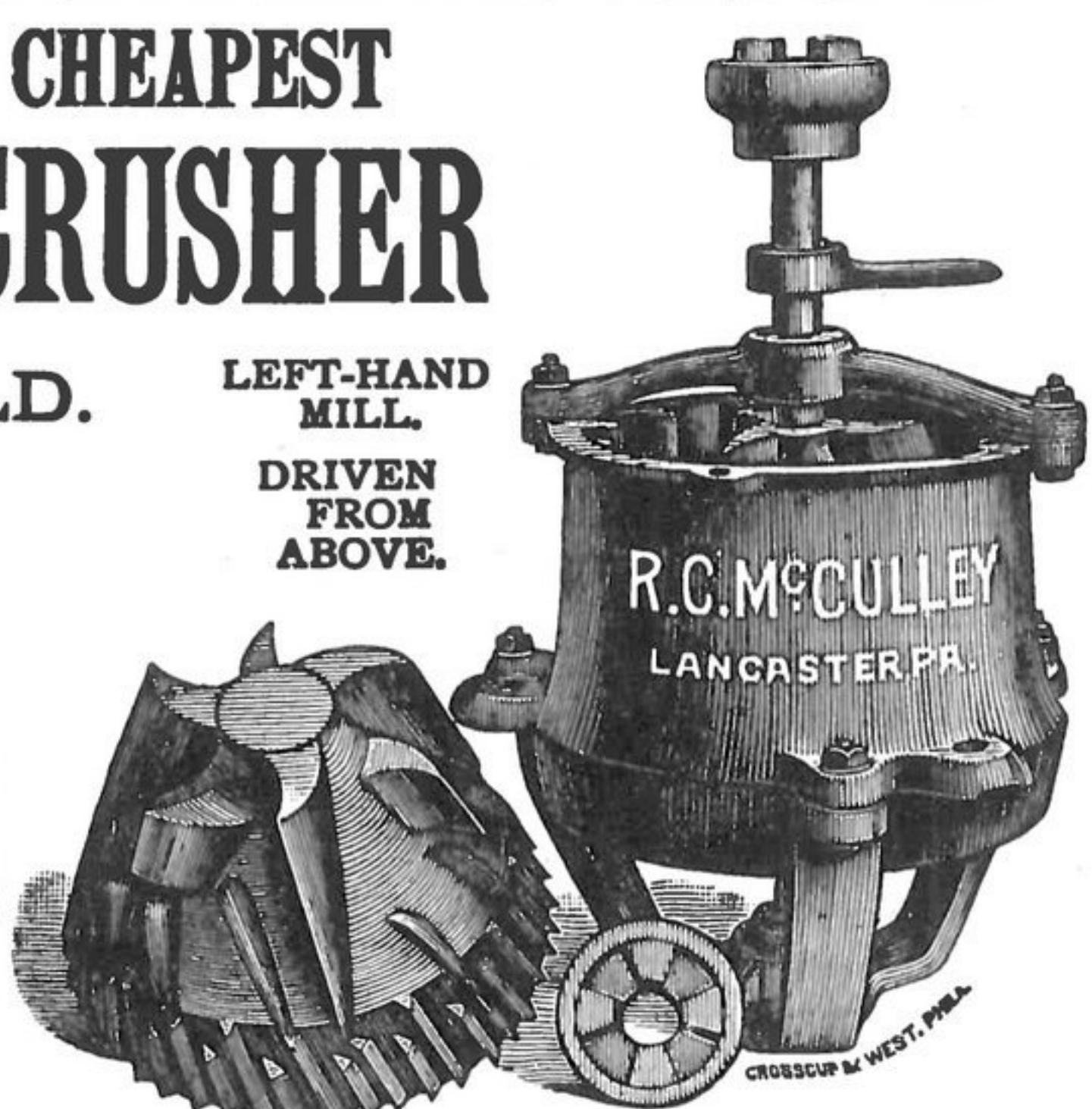
All wearing parts cast of a steel mixture. Notice difference in construction. Most area where most work is done, where all other crushers have least area where most work is done. Low priced machinery is not the cheapest, considering durability and efficiency. Sent on 30 days' trial when satisfactory reference is furnished.

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MILL.
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FROM
ABOVE.

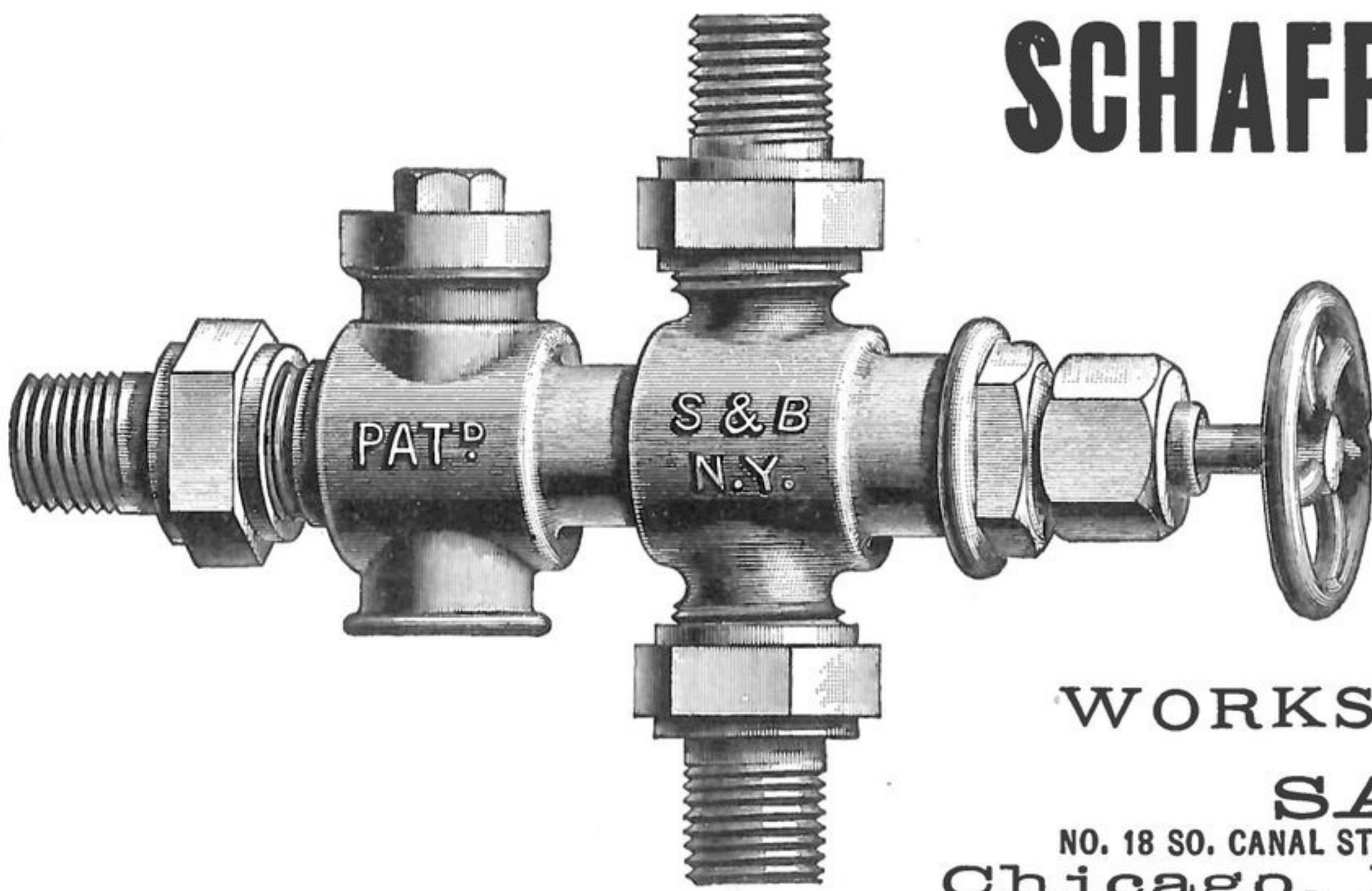


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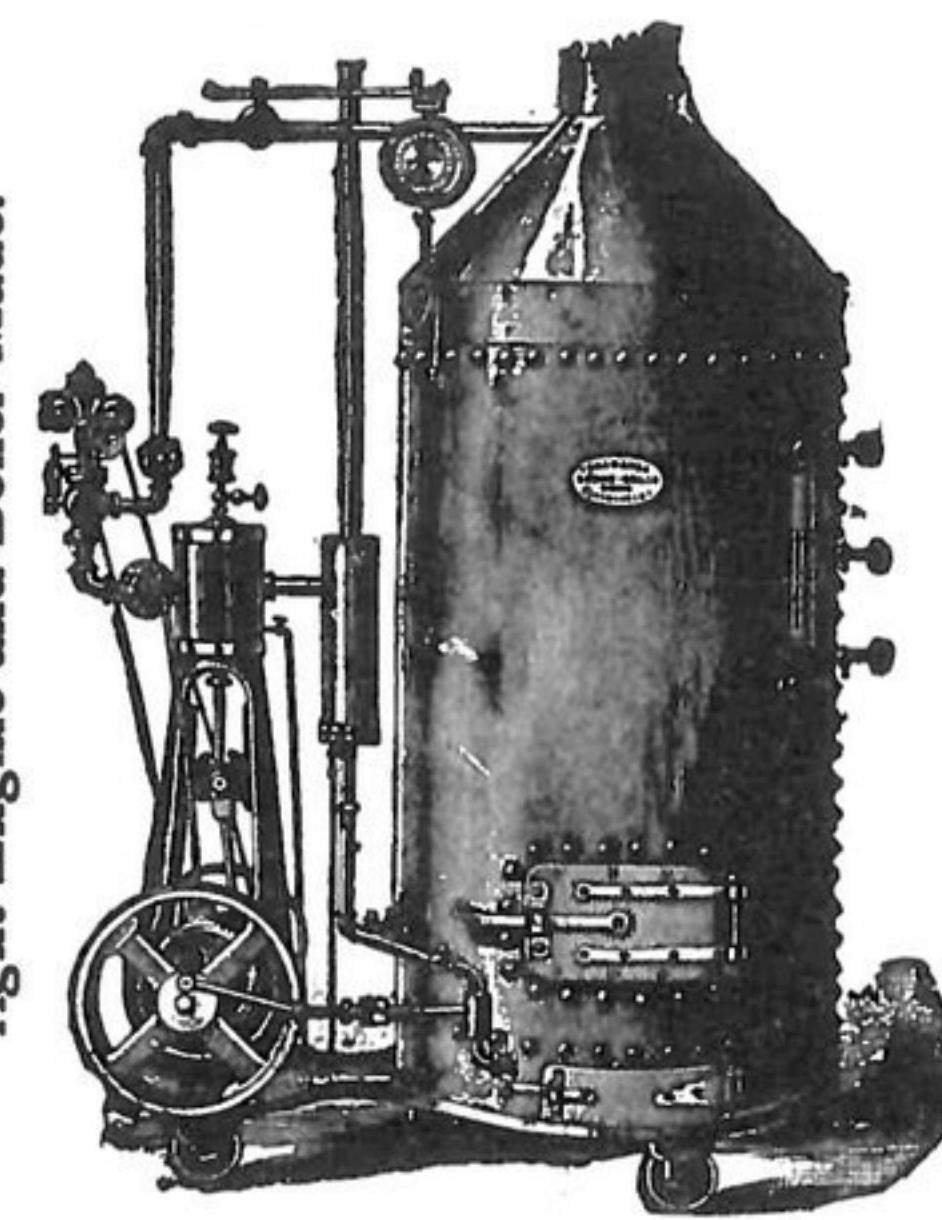
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The Cincinnati Corrugating Co.

PIQUA, OHIO.

SPECIAL PRICE. GUARANTEED.

C. Kerler, Blairsville, Pa., built a feed-mill.
 A. Woodward, grist-mill, Ossian, Ind., quit.
 G. Walter, Butler, Pa., builds a 50-barrel mill.
 J. A. Wister, Foltz, Pa., builds a 40-barrel mill.
 J. Hilliard, Borard, Pa., builds a 40-barrel mill.
 W. & J. W. James, Glen Mills, Pa., builds a mill.
 G. S. Jones & Co., Holton, Ga., build a grist-mill.
 Brady & Harker, Sanborn, Ia., leased a flour-mill.
 Geo. T. Hughes, grist-mill, Somers, Wis., sold out.
 Sutler Bros., Woodland, W. Va., built a flour-mill.
 I. Wood, East Nottingham, Pa., builds a grist-mill.
 Zelt Bros., Washington, Pa., increased mill capacity.
 Geo. W. Wertz, Wernersville, Pa., remodels his mill.
 A. M. Hook, Winchester, Va., builds a 30-barrel mill.
 A. H. Groff's Conowingo mill, Quarryville, Pa., burned.
 R. M. Stevenson, Pocomoke City, Md., remodels his mill.
 C. E. Wallace, Chesterfield, N. J., builds a 40-barrel mill.
 Robt. Thompson, grist-mill, Lyndon, Ontario, Canada, is dead.
 The Otter Tail Mill's cooper-shop, Fergus Falls, Minn., burned.
 Geo. R. Frill, Reading, Pa., puts in a 6-reduction 40-barrel outfit.
 Jacob Schnaid, Menno, Pa., wants a 75-barrel roller flour-mill outfit.
 W. C. Sanderson, Mill Hall, Pa., builds a 40-barrel roller flour-mill.
 A. Schmidt & Bro., West Milton, O., build a 25-barrel roller flour-mill.
 E. V. Kennedy, grist mill, Mosteller, Pa., is succeeded by Charles L. Pugh.
 J. N. Shoemakers, Chambersburg, Pa., remodels his mill to rolls and buhrs.
 John T. Reynolds & Son, Greenville, Ky., remodel their flouring-mill to rolls.
 L. H. Beers, Huntingdon, Pa., remodels his mill to rolls with 25 barrel capacity.
 M. V. B. Kite, Kite's, Va., remodels his mill to rolls with 25-barrel capacity.
 W. F. Welfley & Son, Marksville, Va., increased his mill capacity to 30 barrels.
 J. A. Kunkle's flour-mill, Lisburn, Pa., burned; loss \$6,000; insurance \$4,000.
 Leggett's "Pleasant Valley Flour Mills," Cambridge City, Ind., burned; no insurance.
 M. W. S. Benfer, Beaver Springs, Pa., has built a 35 barrel roller flour-mill.
 The Opelika Milling Co., Opelika, Ala., will build a 200-barrel roller flour-mill.
 Swartley Bros. & Co., Doylestown, Pa., built a 75-barrel mill and a grain elevator.
 Albert Stubbs & Co., flour-mill, Oregonia, O., are succeeded by Chas. T. Long & Co.
 G. & H. D. Schnure, Selin's Grove, Pa., enlarge their mill to 100-barrel capacity.
 A. H. Hoffeditz, Mercersburg, Pa., remodels his mill to rolls with 40-barrel capacity.
 The Frank Githens estate, near Mt. Holly, N. J., builds a 40-barrel roller flour-mill.
 E. B. Cook, of Blackwell's Mills, N. J., and others incorporated the Somerset Mills Co., capital stock \$50,000, to operate a flour and feed mill. They will have an office in Plainfield, N. J.

Thorn & Southall, Louisville, Ky., will build a \$28,500 flouring-mill and grain-elevator.

The Quiston & Co.'s flouring-mill, Jamestown, Pa., burned; loss \$12,000; insurance, partial.

Cohn & Bock, Princess Anne, Md., will build a 50-barrel roller flouring mill; machinery is wanted.

The Hope Church Milling Co., Six Mile Creek, Pa., have bought and started the idle Risher flour-mill.

Oswold Telghman, Trapp, Md., is putting in a special purifier, furnished by the Case Mfg. Co., Columbus, O.

J. R. Woestman and others, Nashville, Ill., incorporated a \$30,000 stock company to build a flouring-mill.

The Case Mfg. Co., Columbus, O., have an order from A. Deeds & Sons, Lancaster, Ohio, for 5 No. 1 flour-dressers.

W. M. Hodge, formerly of North Adams, Mass., will build a meal and feed mill and elevator at Williamsport, Pa.

James Moore, Bellevue, O., is putting in rolls and flour-dressers, furnished by The Case Mfg. Co., Columbus, O.

The Case Mfg. Co., Columbus, O., have an order for 2 pairs of rolls from the Mutual Distillery Co., Uniontown, Ky.

P. F. Causey's Milford Flouting Mills, Milford, Del., operated by J. K. Holson, burned; loss \$12,000; insurance \$8,000.

Anguish & Draper's flour-mill and elevator, Edison, Neb., burned; loss \$15,000; insured; fired by a spark from a locomotive.

B. H. Weller and others, Chicago, Ill., incorporated the Weller Mfg. Co., capital stock \$10,000, to manufacture grain-elevator machinery.

H. J. Williams and others, Greenville, Va., have formed a \$25,000 stock company to build a 100-barrel roller flour-mill. They want a complete outfit of machinery.

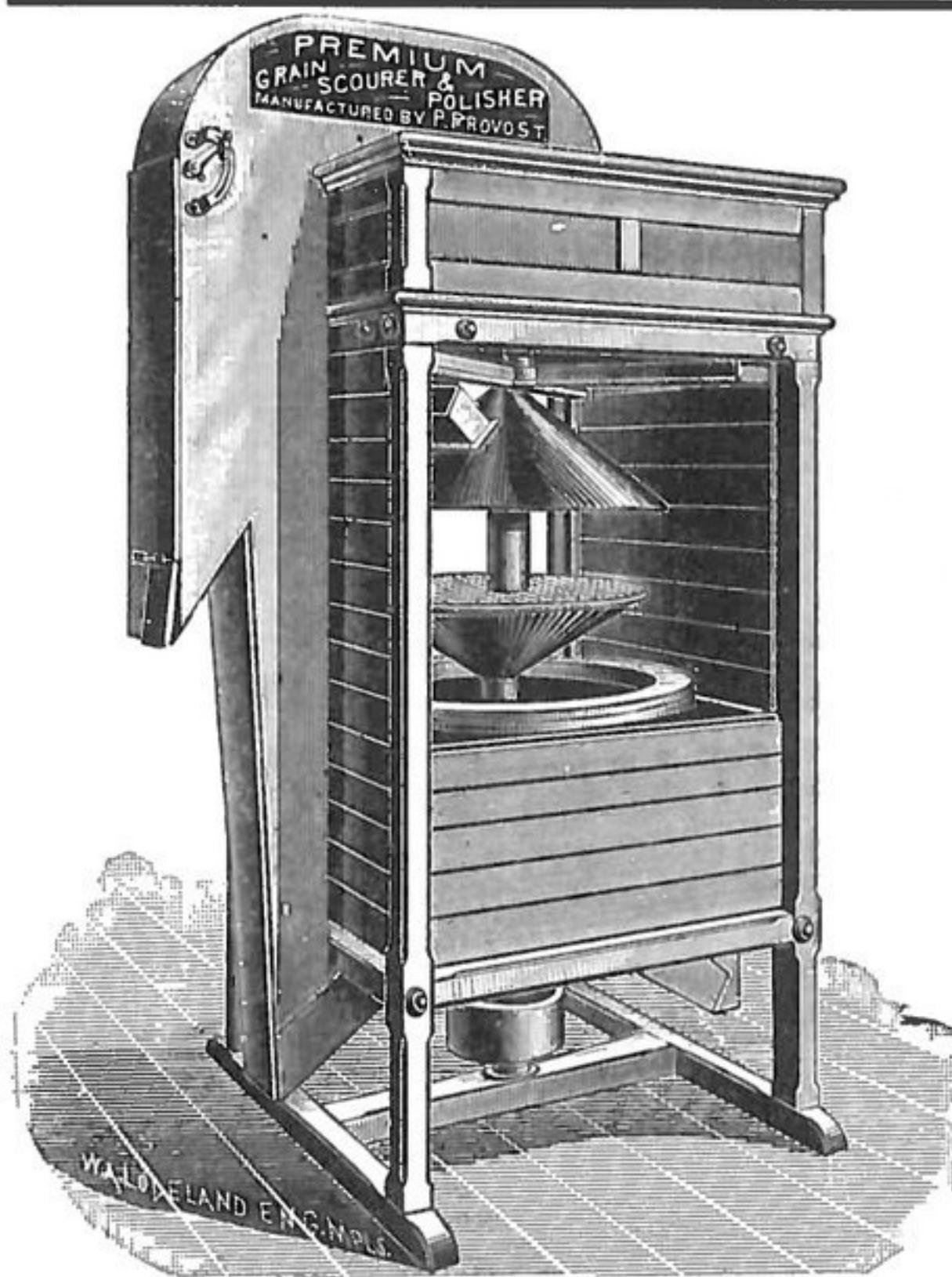
Love & Co., Meridian, Miss., have placed an additional order with the Case Mfg. Co., Columbus, O., for 4 pairs of rolls, 2 flour-dressers and other machinery and supplies.

C. R. Byrnes, Natchez, Miss., has points on a \$22,000 stock company of Missouri men who will build a mill in Natchez if the people in that town will take \$11,000 of the stock.

BOOKS AND PAMPHLETS.

THE QUEEN PAYS ALL EXPENSES.—*The Queen's* last "Free Trip to Europe" having excited such universal interest, the publishers of that popular magazine offer another and \$200 for expenses to the person sending them the largest list of English words constructed from letters contained in the three words "British North America." Additional prizes consisting of Silver Tea Sets, China Dinner Sets, Gold Watches, French Music Boxes, Portiere Curtains, Silk Dresses, Mantel Clocks, and many other useful and valuable articles will also be awarded in order of merit. A special prize of a Seal Skin Jacket to the lady, and a handsome Shetland Pony to girl or boy (delivered free in Canada or United States) sending the largest lists. Every one sending a list of not less than twenty words will receive a present. Send six U. S. 2c. stamps for complete rules, illustrated catalogue of prizes, and sample number of *The Queen*. Address The Canadian Queen, Toronto, Canada.

The publishers of *The Century* are now able to make definite announcement that they have secured for that magazine a series of articles consisting of extracts from the manuscript of one of the most famous autobiographies of our generation, the Talleyrand Memoirs, the publication of which was deferred for thirty years by the wish of Talleyrand when he died in 1838, and again postponed at the request of Napoleon III., who was permitted to examine extracts in 1866 or 1868, and who found them to conflict with his uncle's memoirs written from St. Helena. The Memoirs, the material for which has long been in the possession of the Duc de Broglie, are to appear in five volumes, and *The Century* will print one article from each volume in advance of the issue of the book in any country. These articles, of which the first will appear in an early number, will be accompanied with an introduction by the Hon. Whitelaw Reid, Minister of the United States to France, who will select the extracts.



THE PREMIUM GRAIN SCOURER AND POLISHER.

This machine is guaranteed to do more and better scouring than any other machine in existence. Is easily set up, requires little or no care, except oiling.

Samples of Work Sent on Application

Address for full particulars,

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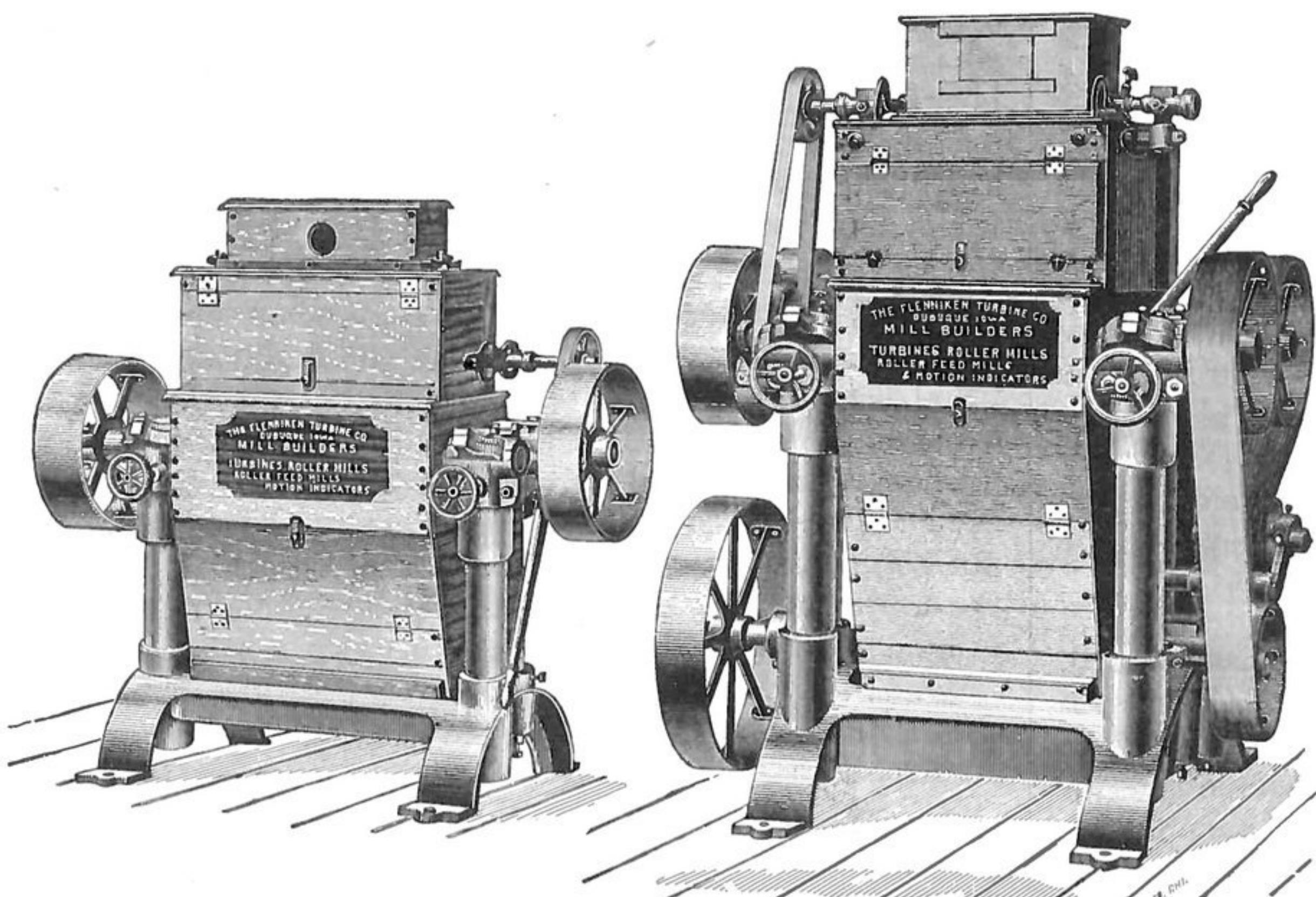
MINNEAPOLIS, MINN.

ONE REDUCTION TO THE FRONT!

*Ye jolly millers, one and all,
Who granulate with burrs,*

A Moses has Come to Deliver You from Egypt. Cease Trying to Make Bricks without Straw. The Red Sea of Expense Has Been Divided.

The Wilderness of Reductions has Been Shortened. There is Manna in Abundance for Those Who Believe. Listen to the Glad Tidings of Great Joy!



ONE REDUCTION ON ROLLS IS A SUCCESS! Two years of experience in a dozen States, with all kinds of Wheat and diversified climates, has justified us in recommending its adoption in place of burrs in each and every case, whether for grinding Wheat, Rye or Buckwheat. We have perfected Roller Mills, Bolts and Scalpers peculiarly adapted to the wants of Small Mills, and all our machines *infringe no patents*, and no claims are made that they do.

Having consummated a bargain with **MR. O. C. RITTER**, the author and patentee of **One Reduction**, which gives us the *exclusive right* to construct mills under his patents, our patrons in the future will receive a license from Mr. Ritter.

SPECIALTIES! { Graham Roller Mills, Round Reels and Scalpers, Sectional Round Reels, Grain Separators, Motion Indicators. Before buying any of these machines send for our prices and descriptive circulars. } **SPECIALTIES!**

Second-Hand Machinery, and Bargains in Every Line.

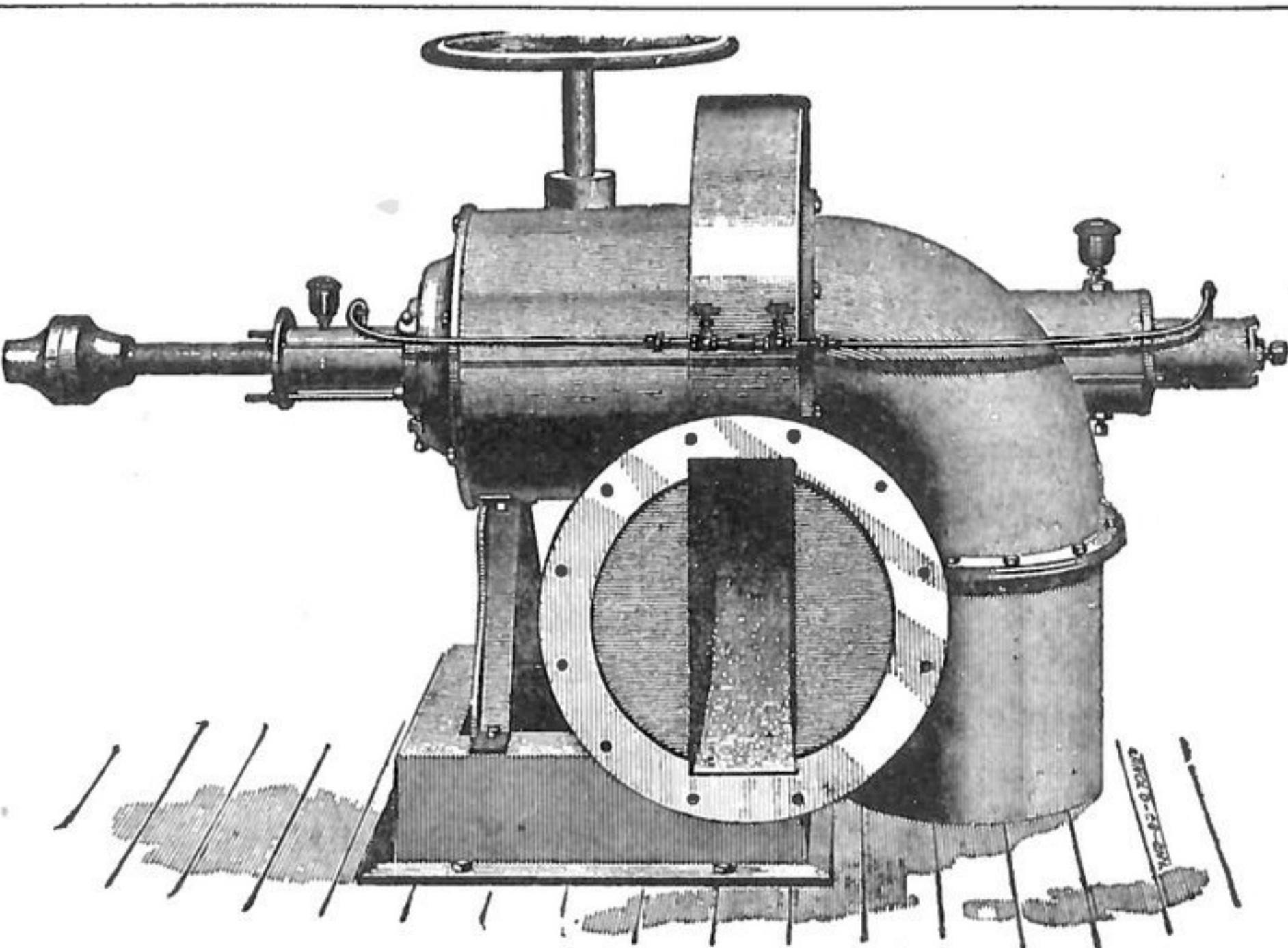
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The Best Turbines!

VERTICAL OR HORIZONTAL,

With or Without Iron Flumes,

—BUILT BY THE—



Flenniken Turbine Co.

DUBUQTE, - IOWA.

EUROPEAN ECHOES.

IN and about Prague, the capital of Bohemia, there are 33 flour-mills, and yet that city manages to support 58 agents of Hungarian mills.

THERE are in different parts of Germany "baking millers" who are objects of the greatest aversion to the baking trade at large, and are treated accordingly. Quite recently a bakers' association issued a mandate enjoining all its members to "boycott" in their flour purchases two large mills to which bakeries are also attached.

FRANCE has \$2,800,000,000 mortgage indebtedness, drawing from 4½ to 6 per cent. interest. Germany has about \$4,000,-000,000, at from 3½ to 5 per cent. interest. Italy has \$3,200,-000,000, being more than one-half of the assessed valuation of its property. In fact, in all European countries, during the past ten years, there has been a decided advance in mortgage indebtedness.

THE Russian government appear determined to further by every means in its power the development of flour-milling in the Czar's empire. The Minister of Domains has a project on foot for founding technical schools in which competent flour-millers may be trained. It is said that the first three of these institutions will be opened at Simpheropol, Jeletz and Tver, which places are all in the south of Russia.

IN spite of urgent representations from the Association of German Millers, the Ministry of Finance has refused to allow the use in German custom-houses of sample-types for flour and bran. The minister holds that in the first place only specially trained experts could make effective use of such samples, and in the second place that there is no sufficient guarantee that the samples may not themselves change color and become deceptive guides.

"FOR years the American farmer," says an Indian journal, "has been selling less wheat for gold in competition with Indian wheat which was bought with silver, and the British importer bought silver with his gold and exchanged for Indian wheat, until the price rose to a point at which it became cheaper to pay for American wheat with gold. Now that silver has risen 16 per cent., the price of Indian wheat is advanced just that much and is handicapped by that percentage in competition with American wheat."

THE last reported phase in the Portuguese milling crisis is the shutting down of all the flour-mills of Lisbon. This strong measure is the reply of the milling trade to the refusal of the authorities to suspend or modify the law which forbids the importation of foreign wheat, unless the importer can show an equivalent quantity of native wheat. But it is said that at the best Portugal can not produce above one-third the quantity of wheat required for the national consumption, and as the present harvest is admittedly deficient, millers have been placed in a very difficult position. It is believed that this strike of master-millers will bring the Government to reason.

SAYS the London "Miller": It is but a year or so ago that a committee of experts, which included some bakers, was appointed by a North German agricultural society to report on the milling value of Roumanian wheat. The committee reported that Roumanian wheat, although smaller grained than Hungarian wheat, was softer and less likely to wear the roller grooves. They found that when milled it yielded 10 per cent. more flour than either Hungarian or American wheat. This flour, moreover, was not only larger in quantity, but more "thirsty" than its rivals. The baking tests instituted by the committee were said to show that whereas 100 kilos. (220.46 lbs.) of American and Hungarian flours yielded 120 kilos. of bread, the same quantity of flour from Roumanian wheat gave 160 kilos. of bread. The latter bread was also found to have a softer and mellower flavor, which was attributed to the virgin character of the Rou-

manian soil. This judgment is entitled to every respect, but as regards the Roumanian soil, it can hardly be imagined that it will remain a stranger to artificial manures very long, at least if the cereal production of the Danubian kingdom is to be maintained at its present level.

A GERMAN miller, who has had some experience in Turkey, warns his countrymen not to accept any situations in Turkish or Bulgarian mills, however tempting the offer, unless the agreement is sealed by a formal and regular contract on paper. "Black and white" is always the best medium for business agreements, but after the case of two English ladies at Aleppo, to which the press has lately given publicity, it would really seem that in Turkish courts of law the most regular documents count for naught. Here is a case in which a Turkish subject keeps possession of a house out of which he has forcibly ejected the owners, and this in spite of the fact that their title deeds are admitted to be in perfect order, while he has not a scrap of writing to produce. Meanwhile the Foreign Office and Her Majesty's ambassador at Constantinople can only shrug their shoulders and sit still.

A QUESTION of considerable interest for German millers was recently decided in the Court of Colmar, near Strasburg. A miller was charged before that tribunal with detaining a certain percentage of grist for his fee, although no special agreement had been made. Expert testimony was taken, from which it appeared that, whereas in former days it was customary for millers to take toll of the grist, the payment in kind ceased fifty years ago when wheat became very dear. It was added that in these days the miller's usual fee for grinding 100 kilos. (220.46 lbs.) of grain is 25 cents or 1s. 2d. This is supplemented by various little perquisites, such as an allowance of 4 per cent. for dirt, while, except in very exceptional cases, the proportion of dirt will not rise above 2 per cent. In the end the court convicted the miller of unlawfully detaining a portion of grist and inflicted on him a fine of about \$100.

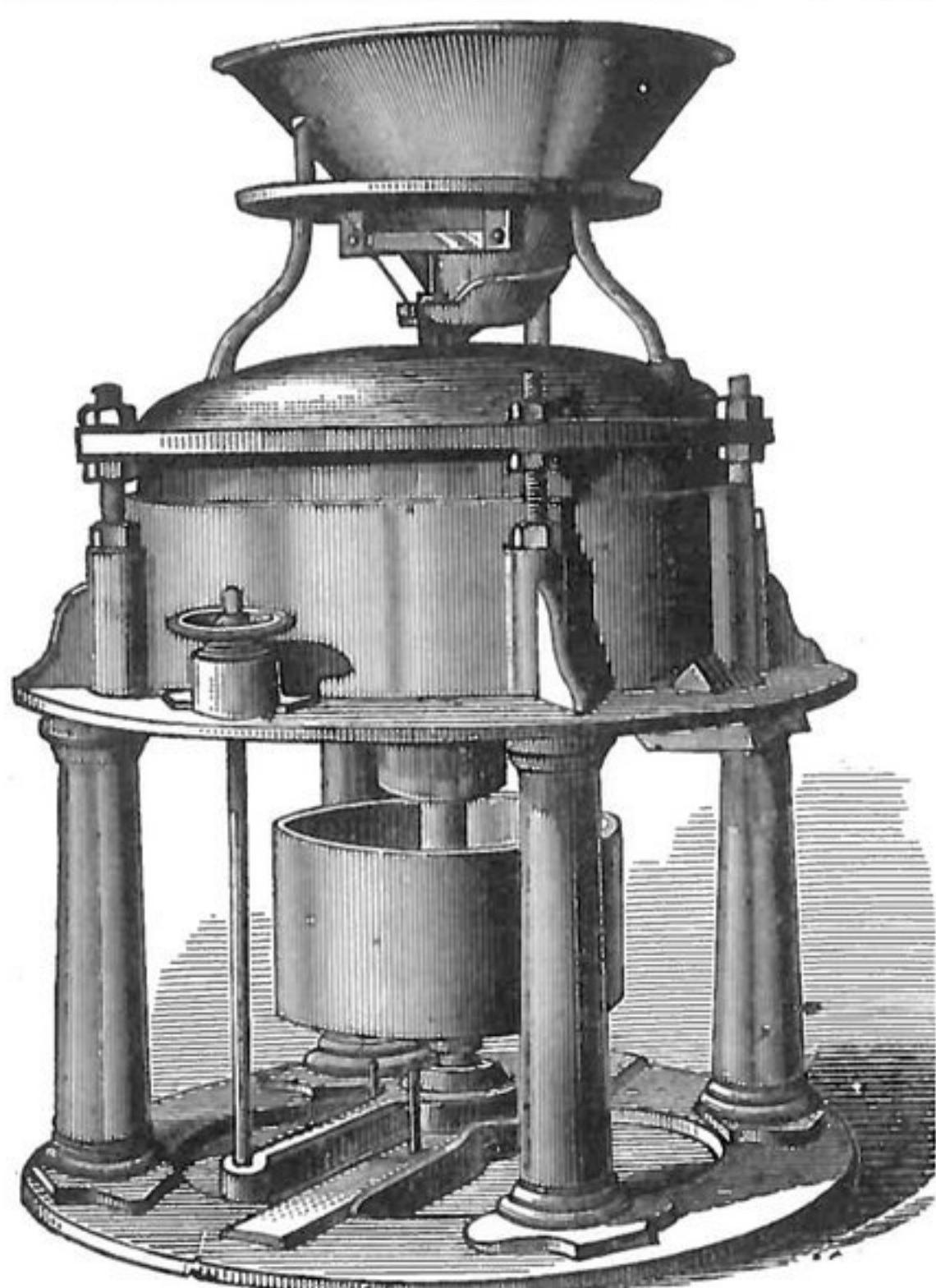
THE fate of Pharaoh's baker has partially fallen to the lot of one the best known bakers in Cassel, Hesse-Darmstadt, Germany. This gentleman had a standing contract to supply the local prison with bread, and early in the current year he fulfilled his engagement so ill that a mutiny was caused among the prisoners. A prosecution was instituted against the offending purveyor, and the public prosecutor demanded a penalty of three months' imprisonment. The accused pleaded that his contract had become absolutely ruinous through the steady rise in the price of flour, but the court, while admitting that his position was not altogether to be envied, held that the baker who supplied inferior bread to people who had no option but to eat it or starve was guilty of a serious offense, and accordingly gave the prison baker the opportunity of practically testing the flavor of prison bread for the term of one month.

A NEW METHOD OF TREATING DISEASE. HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.

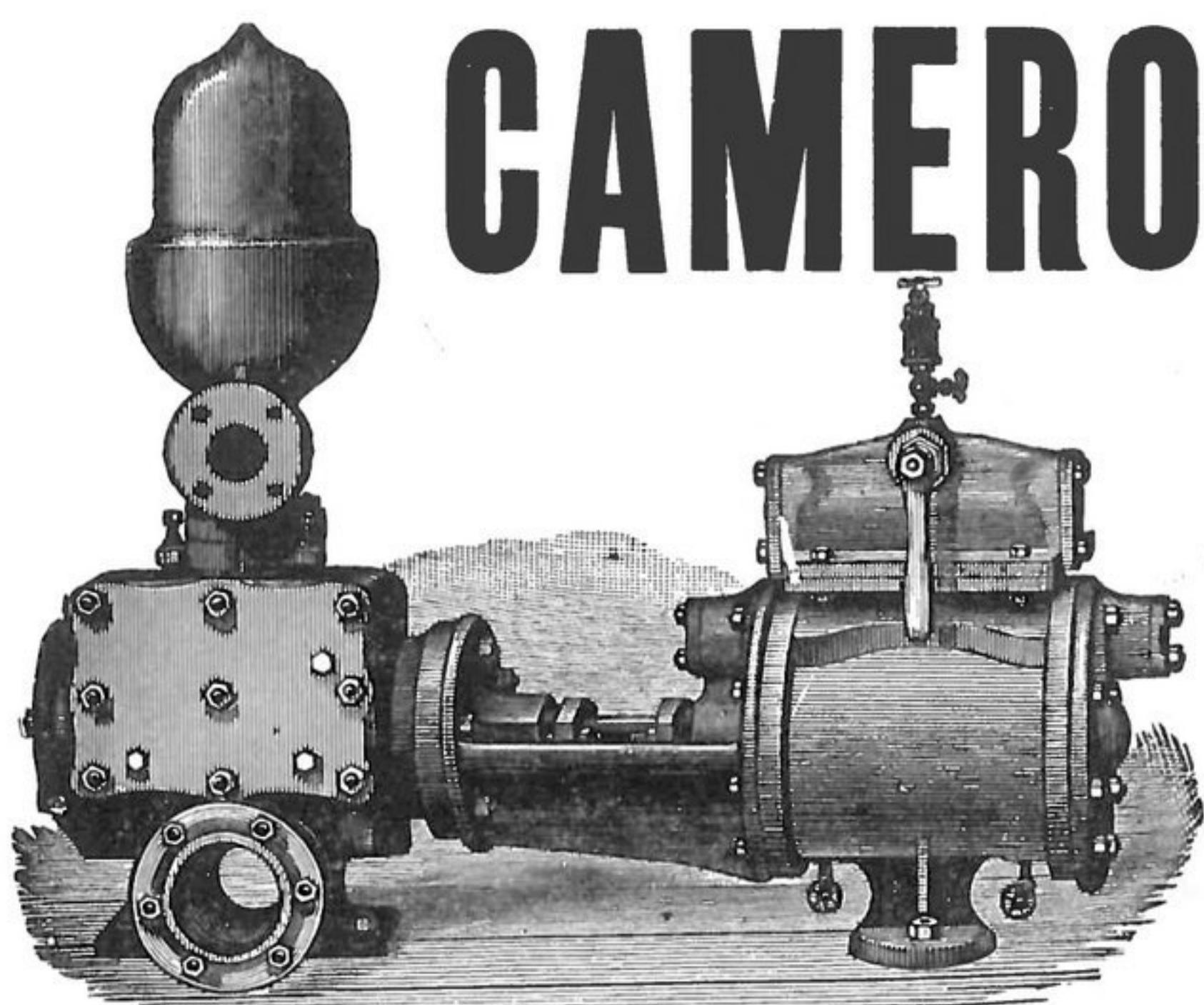
Editor Reifsnider of the *St. Louis Miller*, St. Louis, Mo., was one of the visitors in THE MILLING WORLD sanctum during the past week. He reports good business with both his mill and his journal. "Rife" looks as though the world were going well with him in these days.



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—MANUFACTURERS OF—
PORTABLE MILLS
FOR CORN AND FEED GRINDING,
—WITH—
FRENCH BUHR and ESOPUS STONES

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Mill Furnishings.

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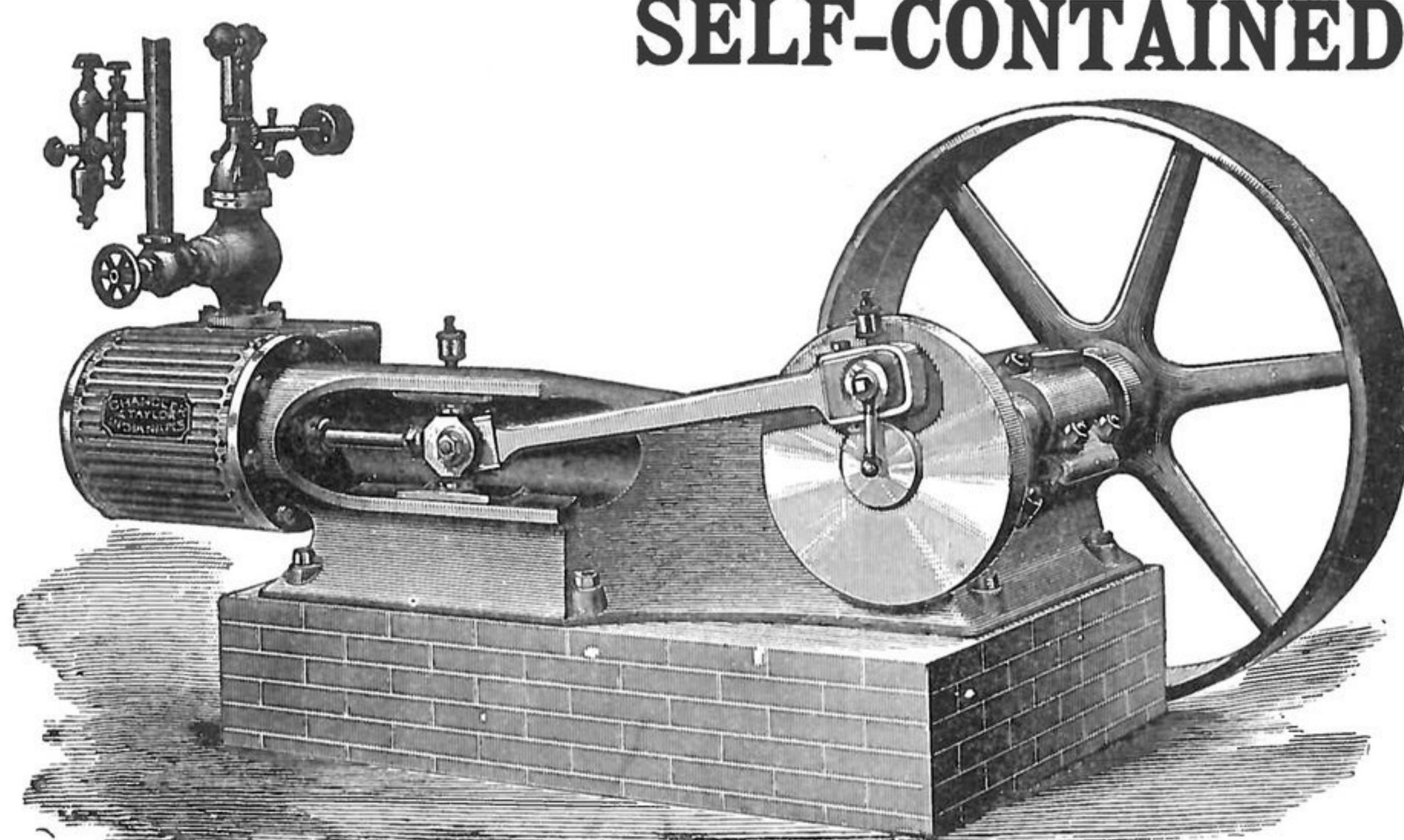


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SELF-CONTAINED STEAM ENGINES
Stationary or
Semi-Portable.

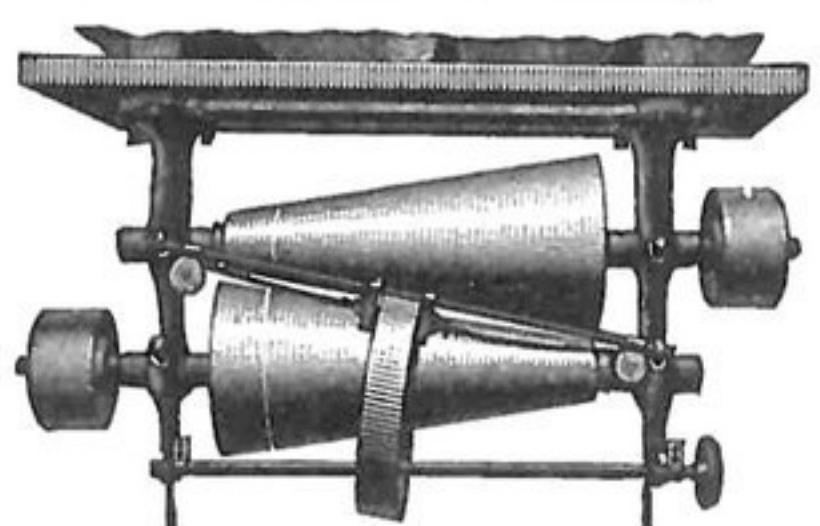
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Prices Greatly Reduced.

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Indianapolis, Ind.
Engines, Saw-Mills and Drain Tile
Machinery a Specialty.

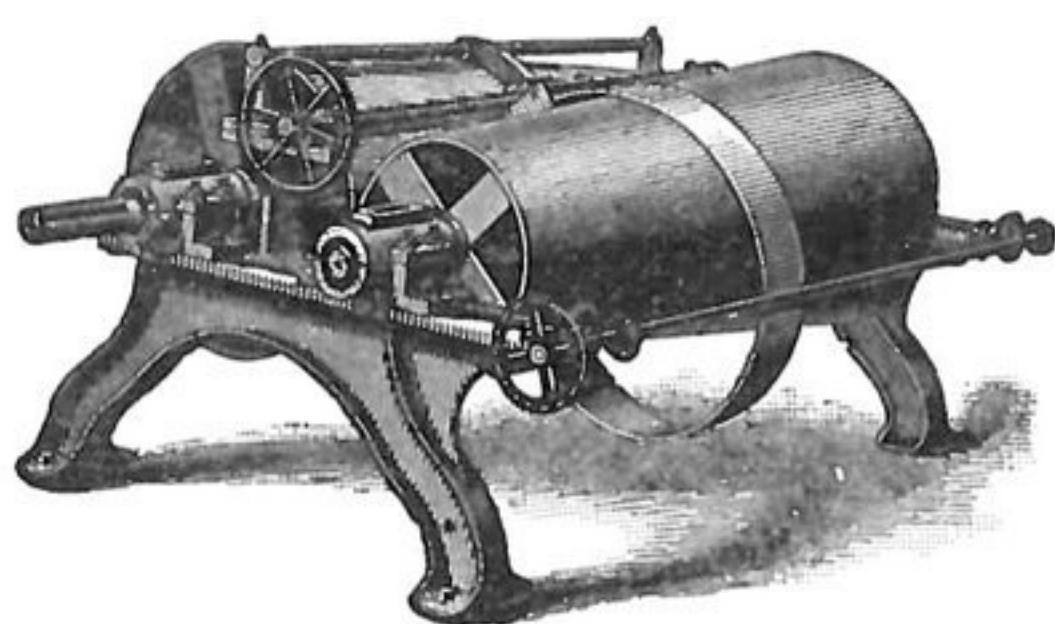
THE EVANS FRICTION CONE & FRICTIONAL GEARING

"PATENTED."



This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is

fluctuating. All sizes made from $\frac{1}{2}$ Horse Power to 50 Horse Power. **SEND FOR ILLUSTRATED CATALOGUE.**



EVANS FRICTION CONE CO., 85 Water St., BOSTON.





OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., Oct. 25, 1890.

Friday of last week was a rather featureless day in the cereal markets. In New York October wheat closed at \$1.07 1/8, corn at 57 1/8c., and oats at 47 1/8c., with generally dull and light business. Wheat flour was firm with wheat, but trade was quiet. The minor lines were featureless.

Saturday brought duller and easier markets. Receipts were larger. October wheat closed at \$1.07 1/8, with Atlantic port receipts 80,343, exports 3,373, and options 1,460,000 bushels. London cables were 11c. higher on California wheat. New York was 4@5c. over European markets on wheat. October corn closed at 57 1/8c., with receipts 222,719, exports 56,367, and options 520,000 bushels. October oats closed at 47 1/2c., with receipts 156,561, exports 17,533, and options 65,000 bushels. Wheat flour was generally stronger on higher prices asked for wheat in the West. Exporters were in the markets with higher limits, but home dealers held off firmly. Receipts were 9,000 sacks and 28,188 barrels, and exports 12,857 sacks and 7,369 barrels. The minor lines were generally strong and quiet.

Monday brought higher and more active markets, on lighter stocks and receipts, on shorts buying, and on continued bull feeling all around. October wheat closed at \$1.08 1/8, November at \$1.08 1/4, December at \$1.09 1/8, January at \$1.10 1/2, and March at \$1.12 1/2. Receipts were 69,552, exports 5,106, and options 3,000,000 bushels. October corn closed at 58 1/8c., November at 59c., December at 59 1/2c., and May at 61c. Receipts were 273,811, exports 27,048, and options 1,320,000 bushels. Iowa and Nebraska husking reports indicated a lower yield than had been estimated. October oats closed at 48c., November at 48 1/2c., December at 49 1/2c., and January at 51 1/4c. Receipts were 126,087, exports 16,467, and options 355,000 bushels. Wheat flour was in fair demand for both trade and export grades at old prices, while holders were firmer on the advance in wheat. Receipts were 9,272 sacks and 46,585 barrels, and exports 2,935 sacks and 13,072 barrels. The minor lines were quiet. Minneapolis adopted the plan of giving a complete report of wheat stocks held in elevators, and also of receipts and shipments there for the week. The visible supply in the United States and Canada was:

	1890.	1889.	1888.
	Oct. 18.	Oct. 19.	Oct. 20.
Wheat	18,607,246	22,057,370	32,972,370
Corn.....	8,259,509	11,334,476	11,203,451
Oats.....	4,323,013	7,113,311	7,757,581
Rye.....	606,100	1,277,778	1,202,342
Barley.....	4,477,410	1,582,572	1,401,070

Tuesday brought still further firmness and greater activity, on light movement and stocks, and on good buying generally. October wheat closed at \$1.08 1/8, November at \$1.09 1/8, December at \$1.10, and May at \$1.13. Receipts were 40,860, and exports 9,083 bushels. Bad weather was reported in Great Britain. October corn closed at 59 1/4c., December at 60 1/8c., and May at 61 1/2c. Receipts were 154,291 and exports 53,351 bushels. Oats closed at 44c. for November, and at 47 1/2c. for May. Receipts were 231,519 and exports 15,865 bushels. Wheat flour was higher and firmer generally. Receipts included 13,594 sacks and 46,190 barrels, and exports 1,500 sacks and 10,705 barrels. The minor lines were featureless.

The following shows the amount of wheat and flour, together with the amount of corn, on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1890.	1890.	1890.
	Oct. 21.	Oct. 14.	Oct. 22.
Wh. & flour, qrs.	1,782,000	1,802,000	1,794,000
Corn, qrs.....	419,000	448,000	351,000

The following shows the amount of wheat and corn on passage to the Continent for the

past week, the previous week, and for the same week last year:

	1890.	1890.	1889.
	Oct. 21.	Oct. 14.	Oct. 22.
Wheat, qrs....	632,000	718,000	469,000
Corn, qrs.....	108,000	137,000	148,000

Qrs.
India wheat to United Kingdom..... 15,000
India wheat to Continent..... 10,000

The imports into the United Kingdom for the past week and the previous week and for same week last year:

	1890.	1890.	1889.
	Oct. 21.	Oct. 14.	Oct. 22.
Wheat, qrs....	283,000	334,000	181,000
Corn, qrs.....	140,000	109,000	133,000
Flour bbls.....	151,000	162,000	110,000

Wednesday brought active and irregular markets, with a lower closing on better receipts, on realizing and on easier cables. October wheat opened at \$1.08 1/8 and closed at \$1.08 1/2, with receipts 52,288, exports 12,216, and options 3,864,000 bushels. One Chicago guess "estimated" the wheat crop at only 380,000,000 bushels, but as the estimate is from a source that is generally in error, it had little or no effect on the market. October corn closed at 59 1/8c., with receipts 314,092, exports 20,802, and options 1,768,000 bushels. A ridiculous Chicago agricultural journal estimate of 1,650,000,000 bushels of poor quality corn was published. The same guess made the crop of corn in the 12 principal corn-growing States 1,200,000,000 bushels. These absurd bull guesses could not keep corn from losing 1/8c. during the day. October oats closed at 49c., with receipts 181,663, exports 10,662, and options 315,000 bushels. Rye grain was quoted nominally as follows: Western 70@74c. for ungraded; 70@71c. for Canada, 73@76c. for State in full loads; car lots, track, 68@73c. Barley was quoted more firmly all around, as the spot offerings were taken off the market and Western markets were stronger. Quotations: Western 70@85c.; No. 2 Milwaukee 79c. spot and to arrive; No. 2 Canada 88@89c.; Extra No. 2 do 92 1/2@93c.; No. 1 do 97@98c. asked; two-rowed State nominal, being held back for higher prices. Malt was firm, but quiet and unchanged. Quotations: 75@82 1/2c. for two-rowed, 80@85c. for 6-rowed, 85 1/2@92c. for country-made Canada and 99 1/2c@\$1.00 for city do. Mill-feed was firm and in good demand, with sales of 40 and 60-lbs. at 85c. Quotations: 40 and 60-lbs., 85c.; 80 lbs. 90c.; 100 lbs. \$1.10.

Wheat flour was in better demand for medium and high grades for the West Indies. Generally all lines were stronger. Receipts included 9,573 sacks and 33,948 barrels, and exports 38,076 sack and 17,518 barrels. The total advance in flour is 10@15c. from late bottom prices. Among sales in New York were bakers' spring wheat extras at \$4.10@4.50, city mills fine at \$3.75 and superfine at \$4, West Indies at \$5.25, city mill patents at \$5.88@6.00. British markets were 25@75c. under the New York market.

Rye flour was dull and firm at \$3.75 for poor, \$4.10 for standard, and \$4.25 for fancy. Buckwheat flour was dull at \$2@2.15 for bags of fair to choice new, and \$1.10@1.15 nominally for old. Corn products were in better demand for barrel stocks, and easier for bag stocks. Quotations were: Western and Southern in barrels \$3.00@3.20; Brandywine \$3.20; granulated yellow \$3.25@3.50; granulated white \$3.50@4.00; coarse bag meal \$1.09; fine yellow \$1.23; fine

white \$1.29 for city; Southern \$1.00 @ 1.64; brewers \$1.59.

One of the sample reports used on the wheat market was the following dispatch from a Chicago dealer to a New York dealer: "I have been a free buyer of wheat for these reasons: East of the Rockies the consumption is 270,000,-000, for seed 44,000,000 and for manufacturing purposes 5,000,000; exported to October 10th, 18,000,000. This makes 337,000,000, with the Government estimate of 350,000,000, leaving for export to Atlantic ports 13,000,000. Pacific slope consumption is 27,000,000; seed 6,000,000; exported to October 10th 8,000,000, making 41,-000,000; Government estimate 53,000,000; leaving 12,000,000 on Pacific slope for export. Atlantic and Pacific coasts together leave 25,-000,000 for export. These are good reasons to me for buying wheat, and there is no telling how high it will sell."

Thursday brought no particular market changes. October wheat closed at \$1.07 1/8, with receipts 85,000, spot sales 17,000, and options 2,840,000 bushels. October corn closed at 58 1/8c., with receipts 130,000, exports 20,000, spot sales 138,000, and options 1,088,000 bushels. October oats closed at 48 1/2c., with receipts 165,000, spot sales 104,000, and options 225,000 bushels. Wheat flour was dull. Receipts were 31,000 and sales 19,000 packages. Quotations were: Low extras \$3.70@4.15; city mills \$5.-15@5.40; city mill patents \$5.50@6.25; winter wheat low grades \$3 70@4.15; fair to fancy \$4.20@5.50; patents \$4.90 @ 5.85; Minnesota clear \$4.60 @ 5.35; straight \$4.90@5.65; Minnesota straight patents \$5.35@6 10; rye mixtures \$4.50@5.10; superfine \$3.15@3.95. The Minneapolis mills ground 155,730 barrels last week, and western millers were firm in holding. The minor lines were generally unchanged.

BUFFALO MARKETS.

Buffalo, N. Y., October 24, 1890.

The grain markets were generally quiet. Prices were as follows:

WHEAT—There were some sales here, but the market fell off toward night and trading died out. The reported sales were 15,000 bu No. 1 hard at \$1.11 1/4, 11,000 No. 1 Northern at \$1.05 1/4, 8,000 bu do at \$1.05, 500 bu No. 1 Northern at 99 1/2c, 24,000 bu do at \$1.00, and 3,000 bu old do at \$1.09. No. 2 red was held at \$1.06, No. 1 white at \$1.04, and Oregon white, to arrive, at 97c. CORN—The market fell off after some sales at the closing prices of yesterday and closed at 56 1/4@57c for No. 2 yellow, 56 1/4@56 1/2c for No. 3 do, 55 1/2@55 1/4c for No. 2 corn, a d 54 1/4@55c for No. 3 corn. OATS—Early in the day several cars of No. 2 white were sold at 51@51 1/2c, but they closed at 50 1/2c, No. 3 white at 49 1/2c, and No. 2 mixed at 48 1/4c. BARLEY—Sales are made at the rate of 92@94c for No. 1 Canada, 90@92c for No. 2 do; 86@88c for extra No. 3 do; 81@84c for No. 2 do; 74@77c for No. 2 Western; 69@72c for extra No. 3 do, and 65@69c. for No. 3 do. RYE—The market is entirely nominal at 70@72c. for No. 2. OATMEAL—Akron, \$6.70; Western, \$6.45 per bbl; rolled oats, in cases, 72 lbs, \$8.60. CORNMEAL—Coarse, \$1.10@1.15; fine, \$1.15@1.20; granulated \$1.75 per cwt. MILL-FEED—City-ground coarse winter, \$16.00@16.75 per ton; fine do. \$16.00@17.50; finished winter middlings, \$19.00@20.00; coarse spring do, \$19.00.

FLOUR MARKET.

Spring Wheat.	Winter Wheat.
Patents.... \$6.25@6.50	Patents... \$6.25@6.50
S't Bakers... @5.75	S't roller.... 5.25@5.50
Bakers' cl'r... @5.25	Amber... 5.00@5.25
B Rye mixt.... @4.75	Crk'r flour... 5.00@5.25
Low Grades... @3.50	Low grades... 3.50@3.75
Rye flour... 3.75@4.00	Graham.... 4.75@5.00

Retail prices 50c. above these quotations.

C. O. Bartlett's Net Prices.
DUFOUR BOLTING CLOTH.

0000..... .86	2..... \$1.10	7..... \$1.46	12..... \$1.86	Link Belting.
000..... .91	3 1.20	8..... 1.50	13..... 2.16	Sprocket Wheels.
00..... .95	4..... 1.27	9..... 1.60	14..... 2.34	Shafting, Pulleys, Etc.
0..... .98	5..... 1.33	10..... 1.65	15..... 2.58	General Mill Machinery.
1..... \$1.04	6..... 1.46	11..... 1.74	16..... 2.91	Write for Prices.

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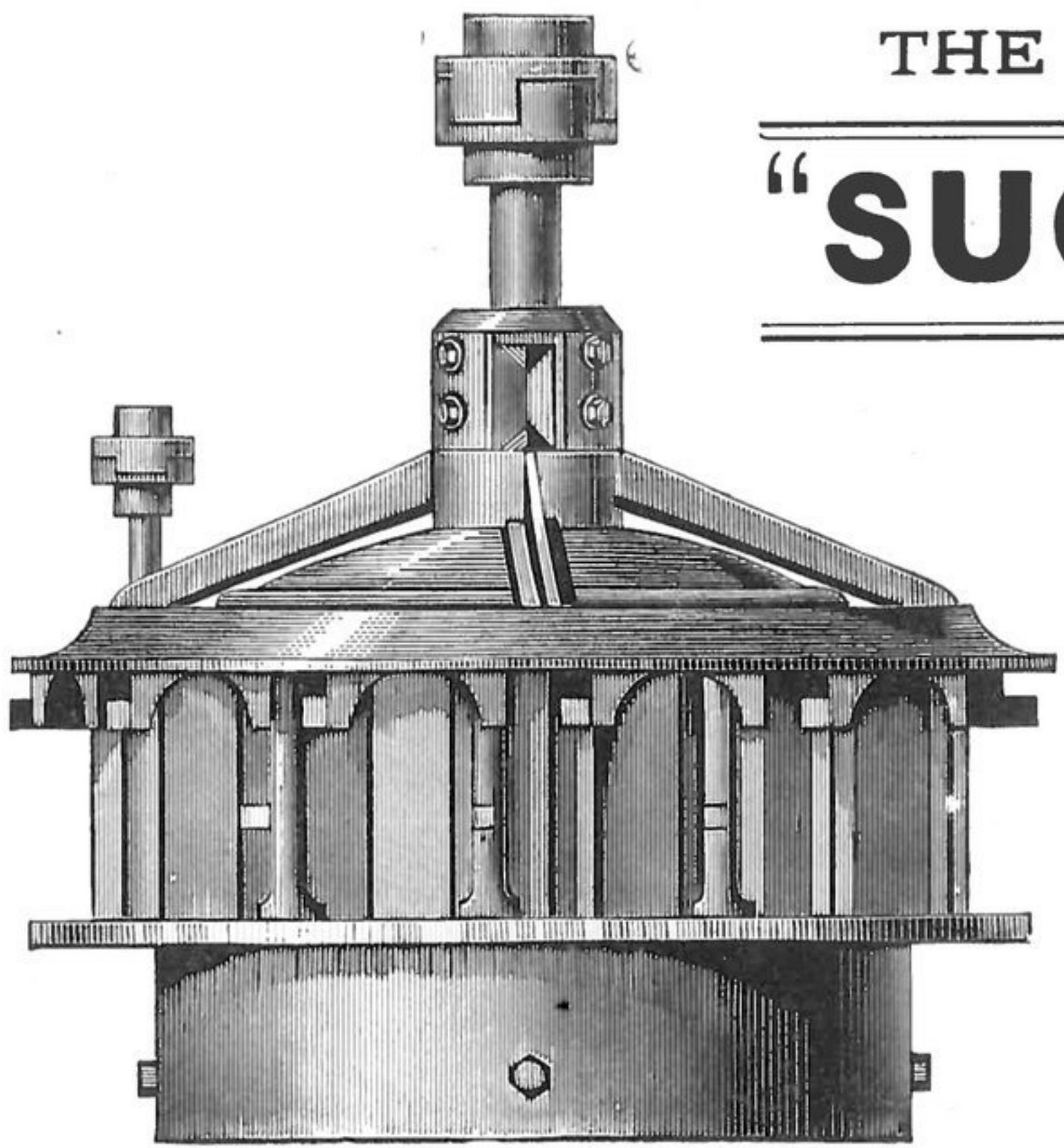
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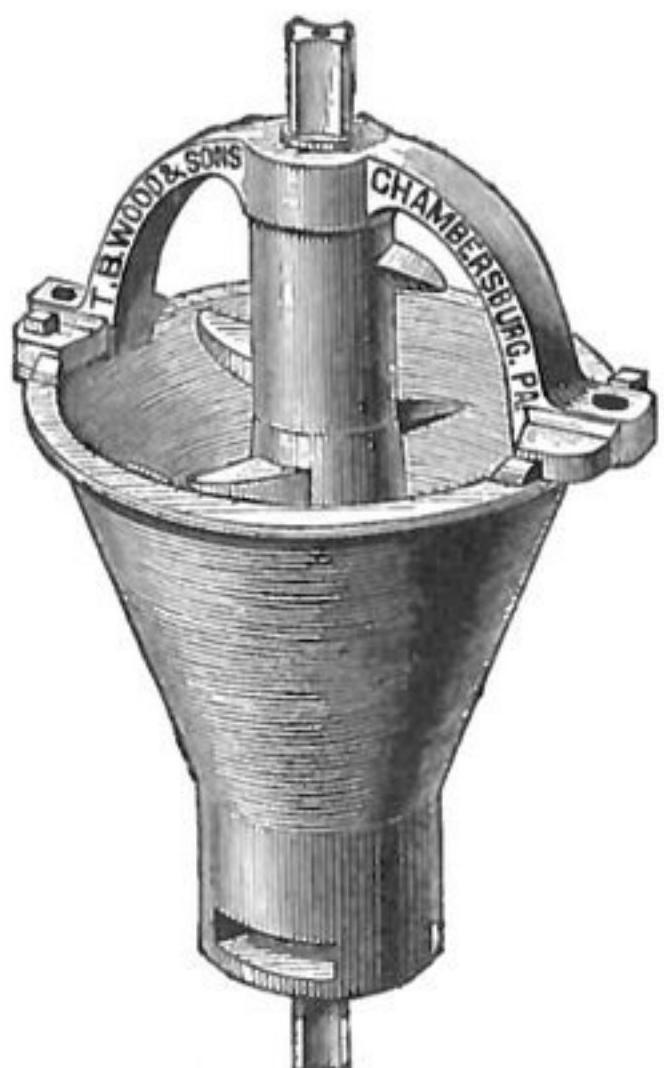
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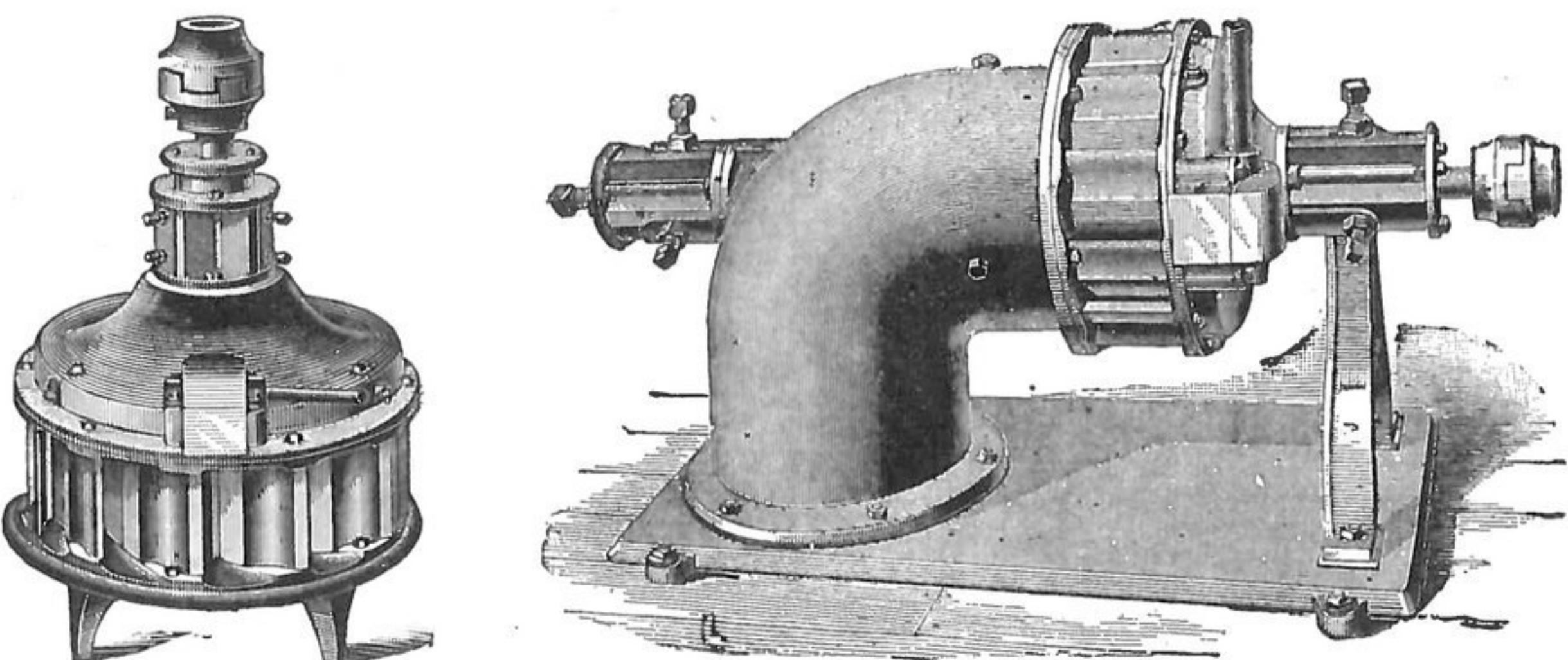
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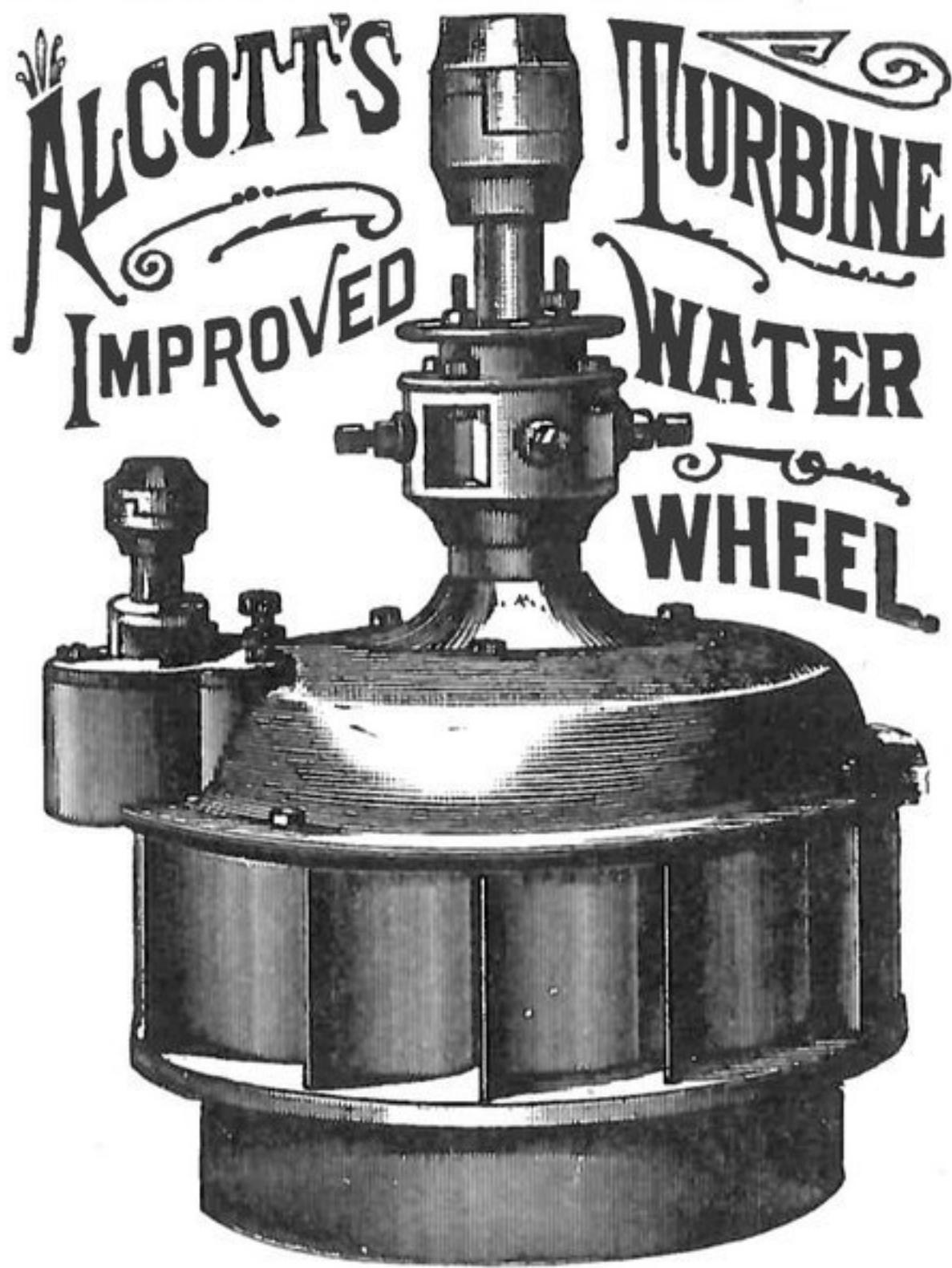
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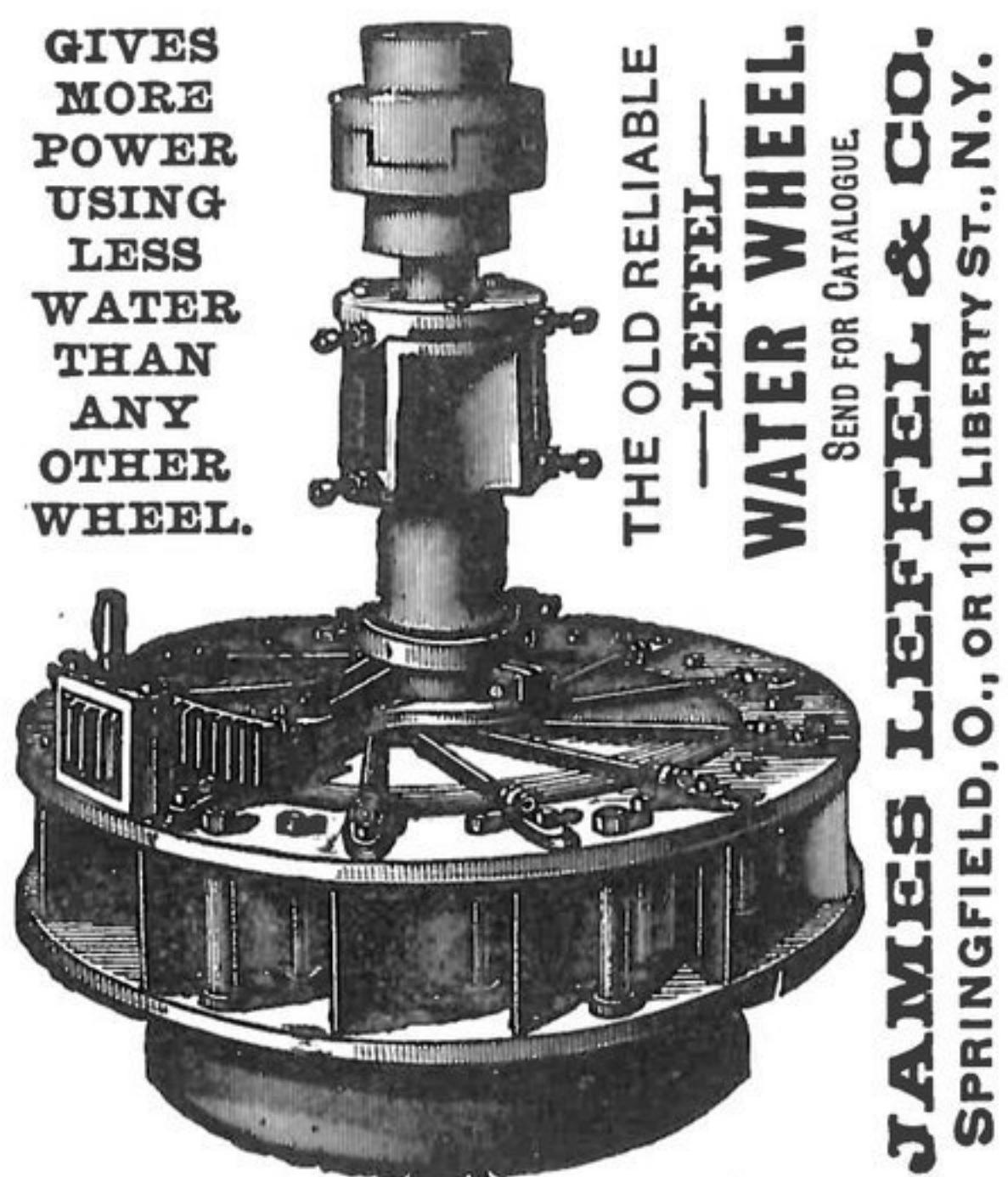
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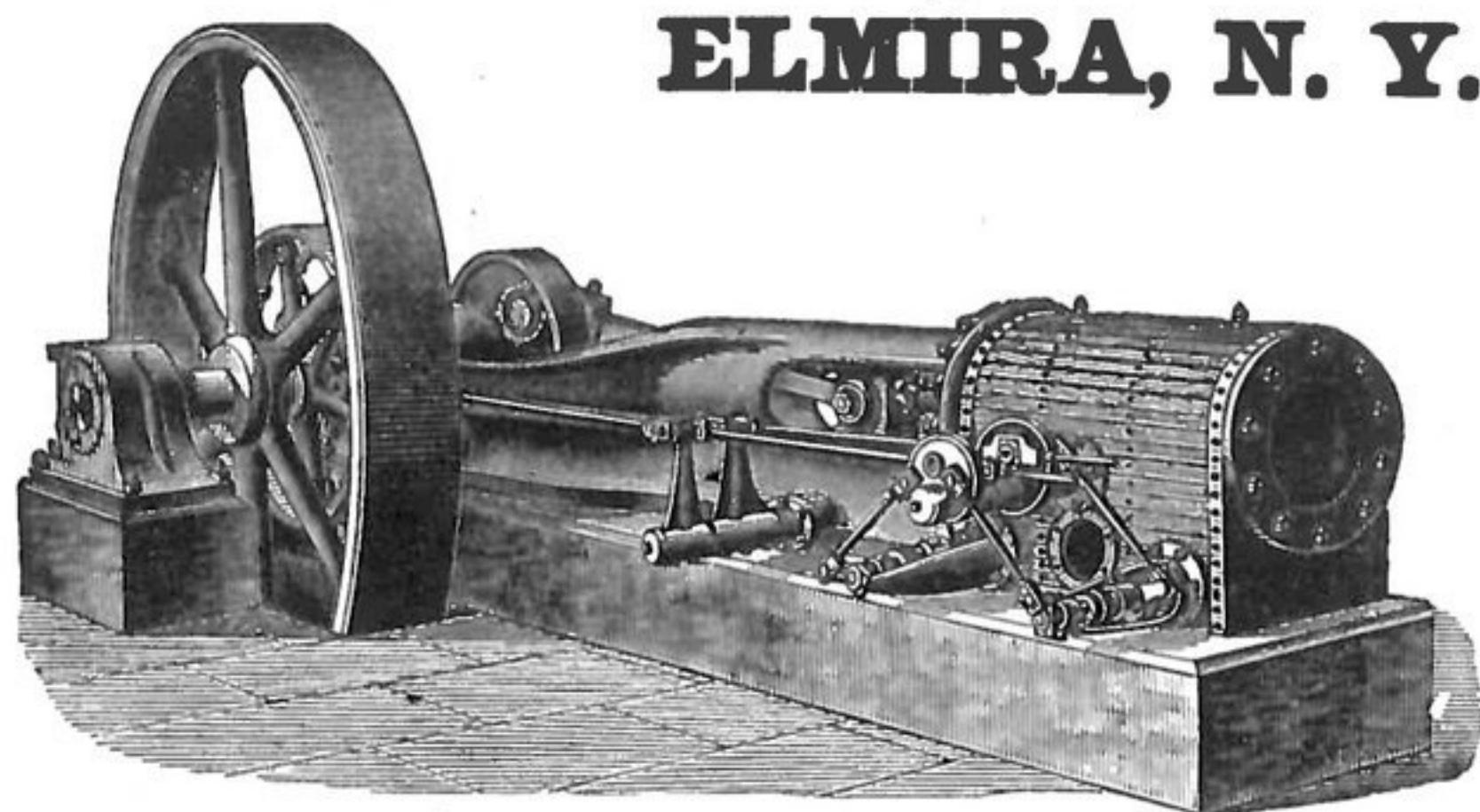
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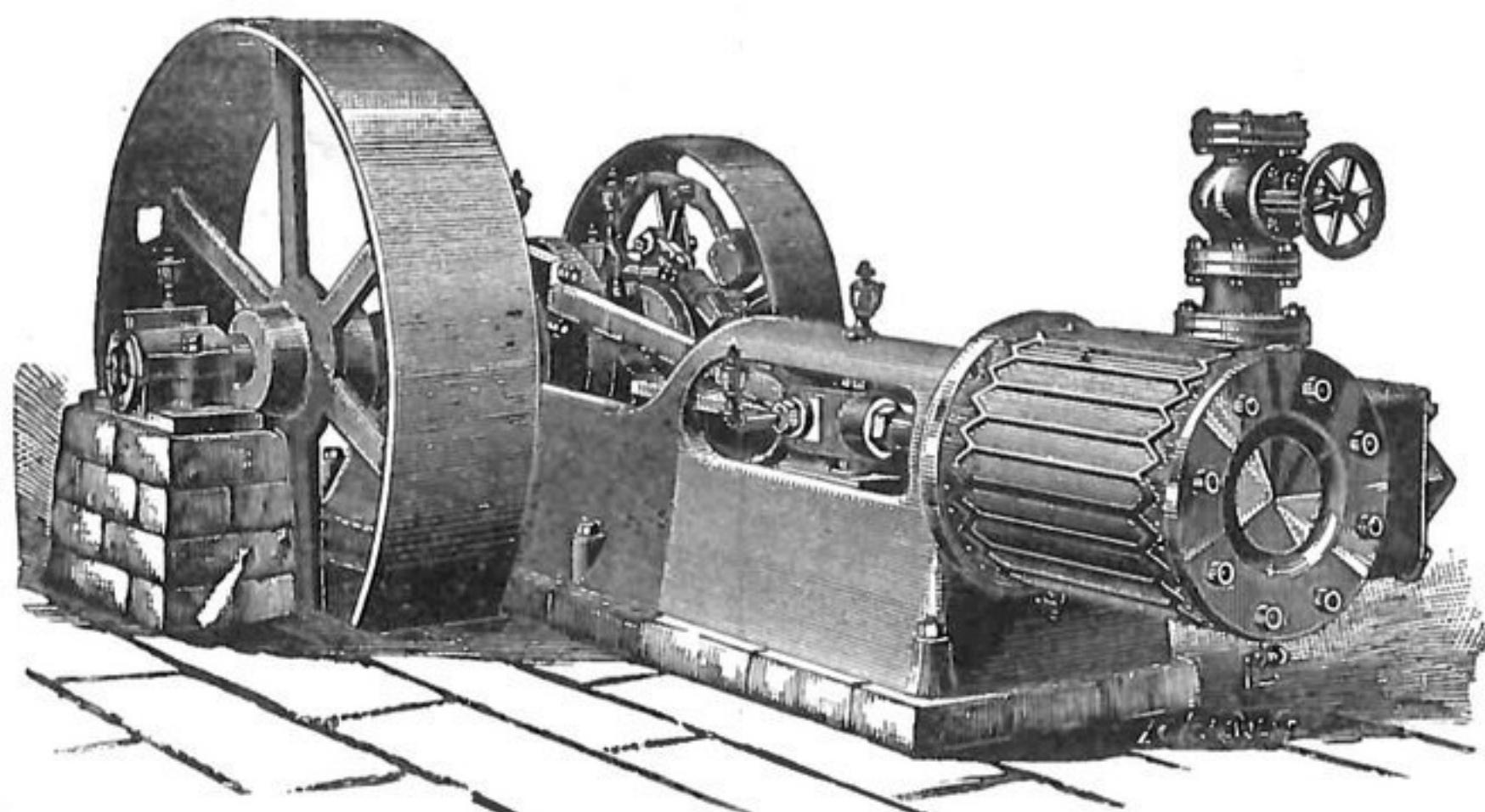
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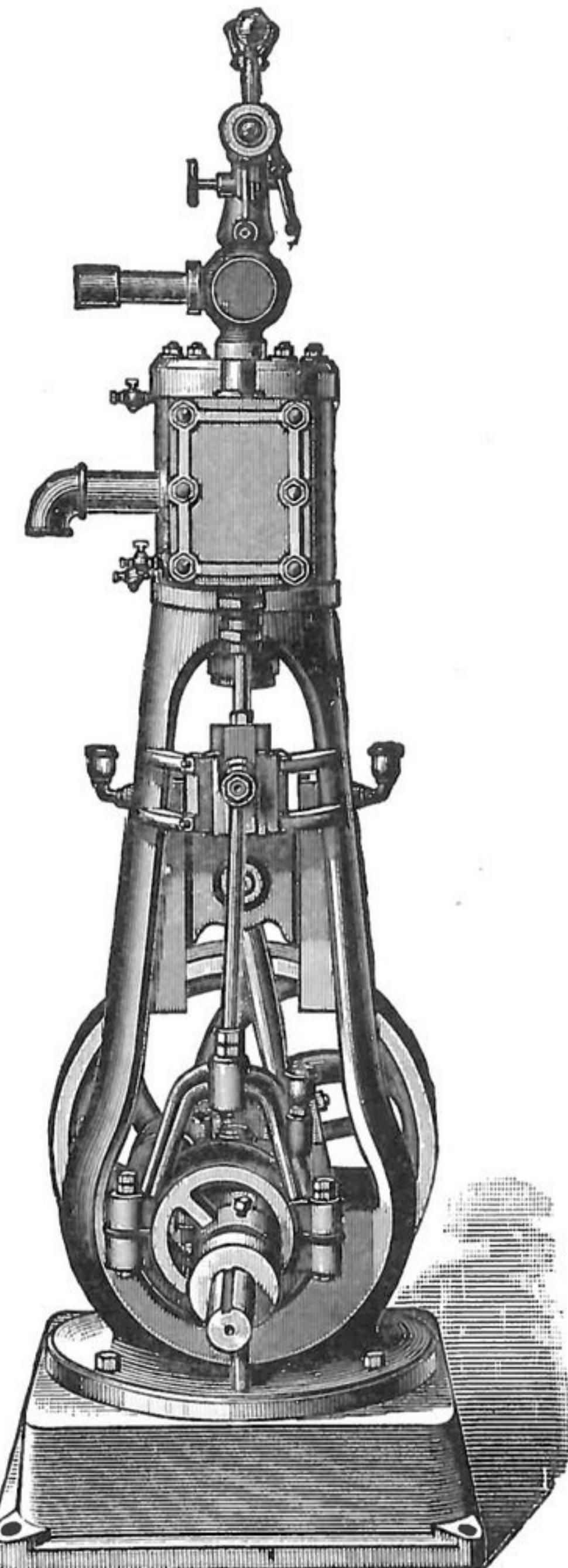
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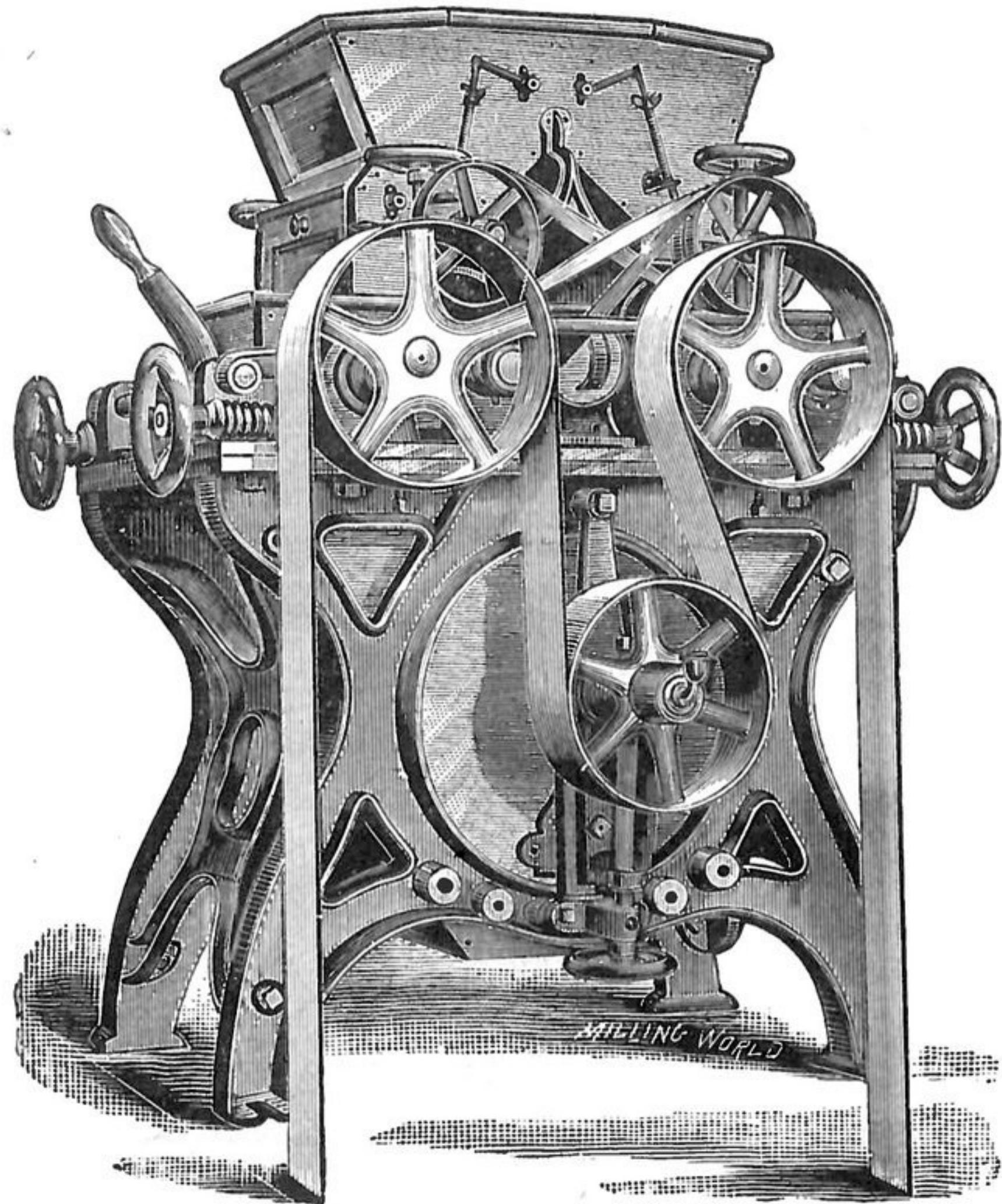


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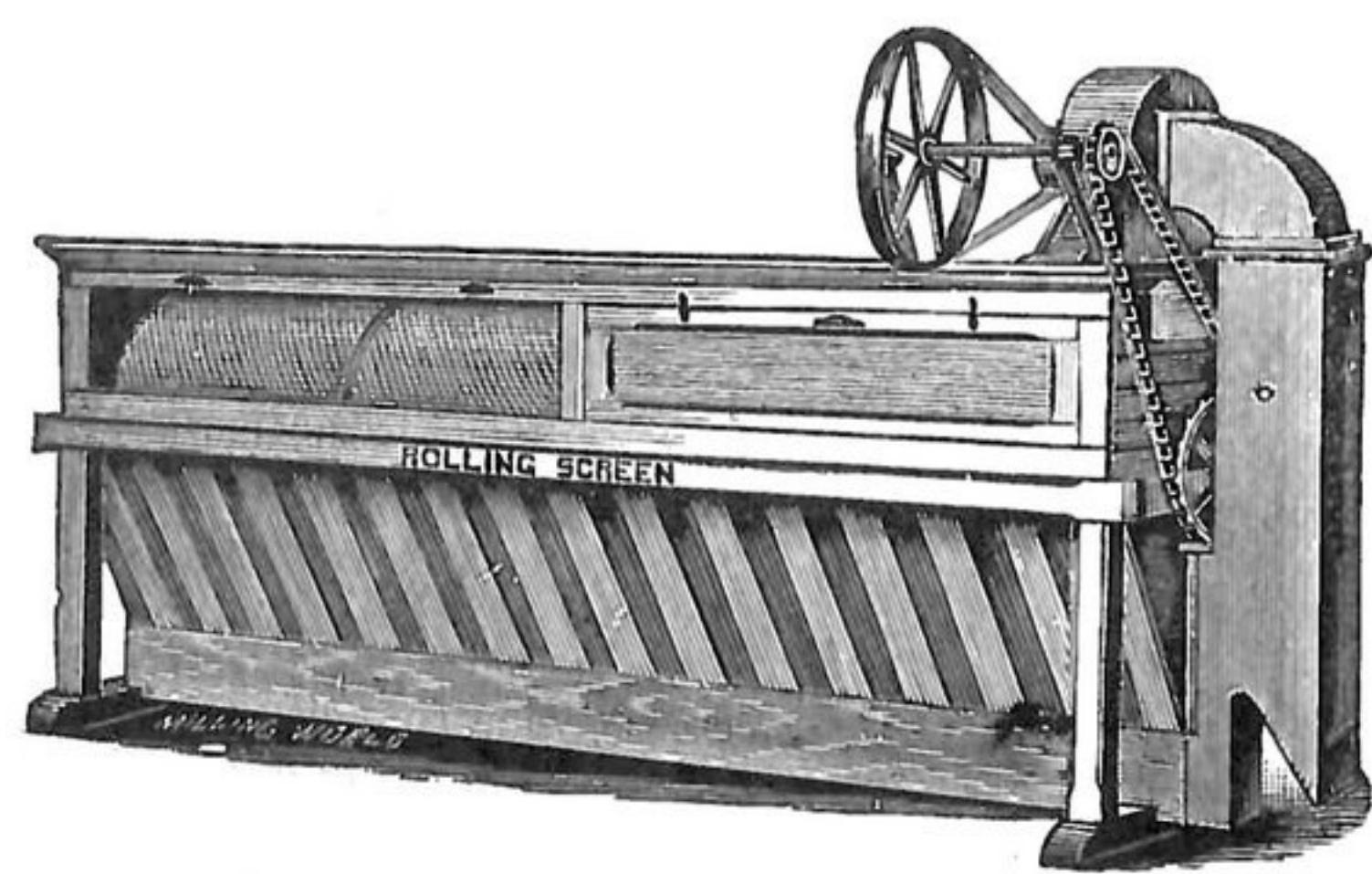
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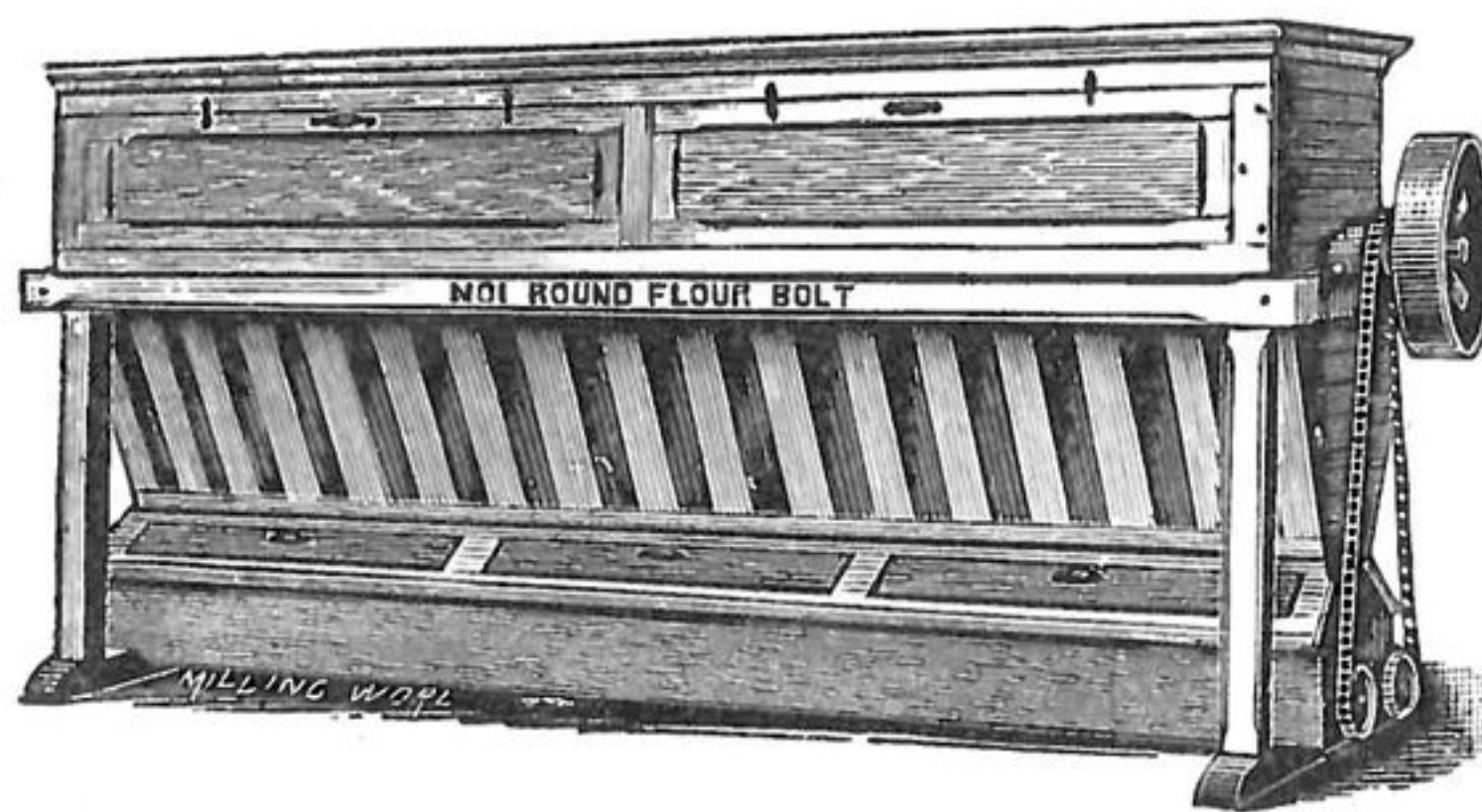
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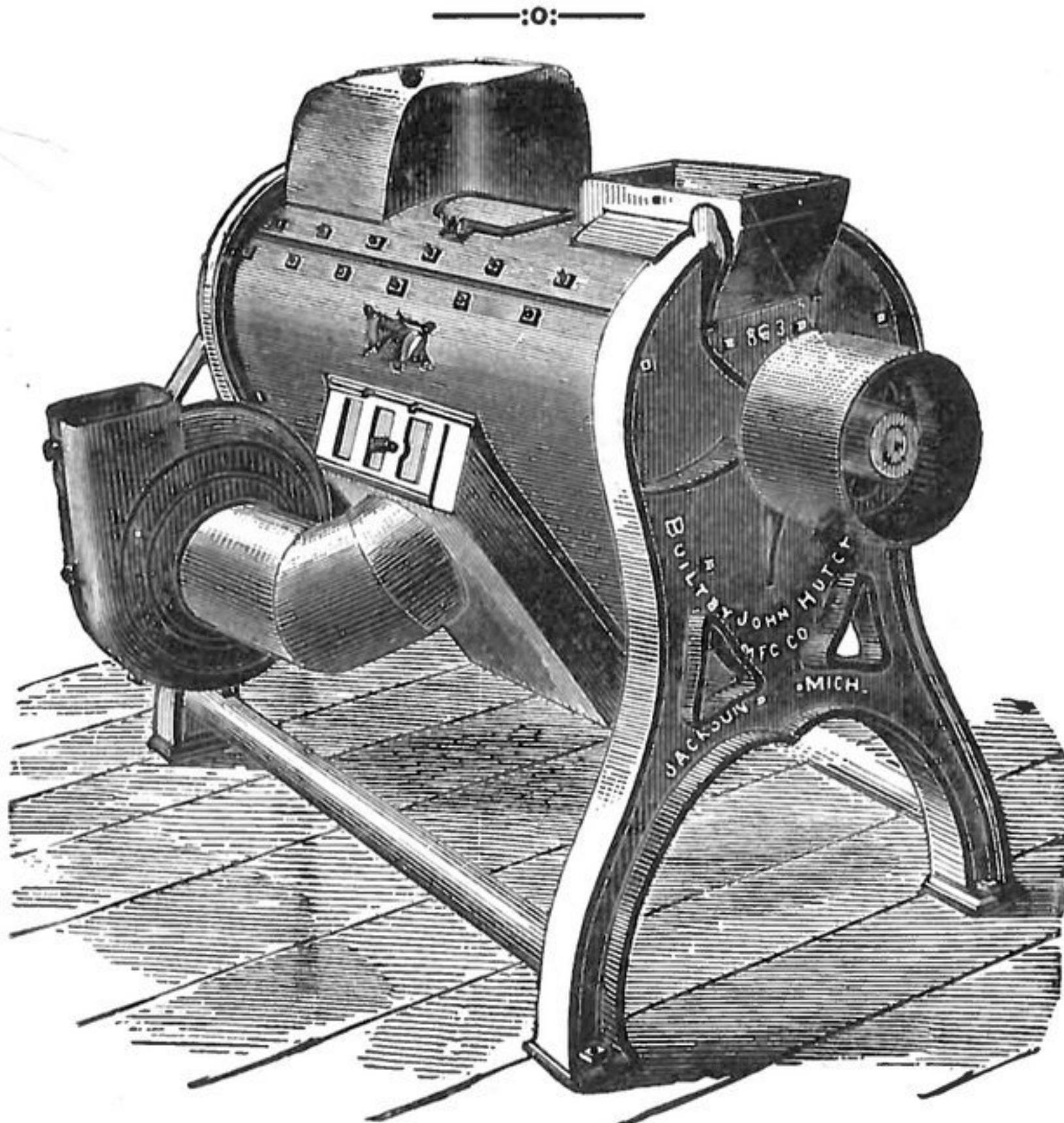


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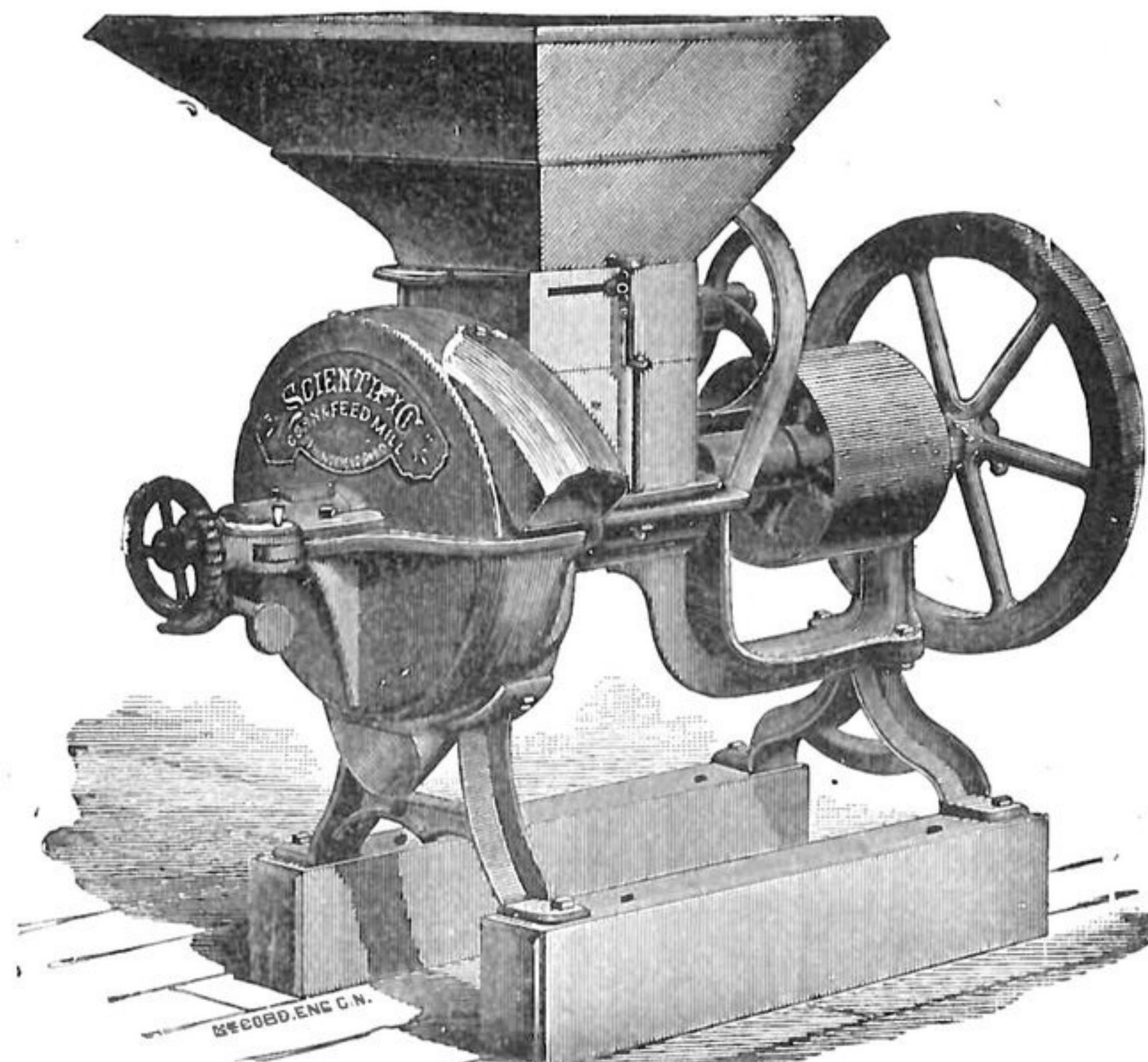
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